L-EGS10: AM1 Science Data Processing End-To-End Confidence Test for Langley DAAC

Overview:

The end-to-end AM1 Science Data Confidence test will demonstrate the readiness of the LDAAC to ingest, archive, process and distribute Level 0 and higher science data products for CERES, MISR, and MOPITT. The test will include ingest of the Level 0 and ancillary data, generation and archival of the products, and user search and access of products on the server. The test will verify the individual subsystems at the LDAAC interface with each other and with the data sources and destinations of the data products. The test will also verify the LDAAC functions as a whole in meeting the requirements of the science community as defined in the F&PRS document.

Assumptions:

- The interfaces between the LDAAC and EDOS, FDF and other DAACs are fully operational.
- EBnet and NSI connections are functional according to ECS specifications.
- The Product Generation Executives (PGEs) required to produce L1 and higher level products for the CERES and MISR instruments are available. Some of the PGEs should be integrated into the LDAAC system.
- The ESDTs required for these tests are defined and available in the system.
- SSI&T and the interface tests ICT1 and ICT3 must be passed.

Test Objectives:

- Verify ECS user's ability to subscribe to CERES, MISR and MOPITT data products.
- Verify ingest of CERES, MISR and MOPITT L0 data.
- Verify archive of CERES, MISR and MOPITT L0 data.
- Verify product generation for CERES and MISR.
- Verify capability to transfer MOPITT L0 data to SCF and ingest MOPITT products from SCF.
- Verify capability to distribute CERES, MISR and MOPITT products.
- Verify ability to recover from failure during CERES and MISR processing.
- Verify ability to ingest and archive ancillary data.
- Verify ability to concurrently ingest, archive, process and distribute CERES, MISR and MOPITT products.
- Verify SSI&T capabilities.
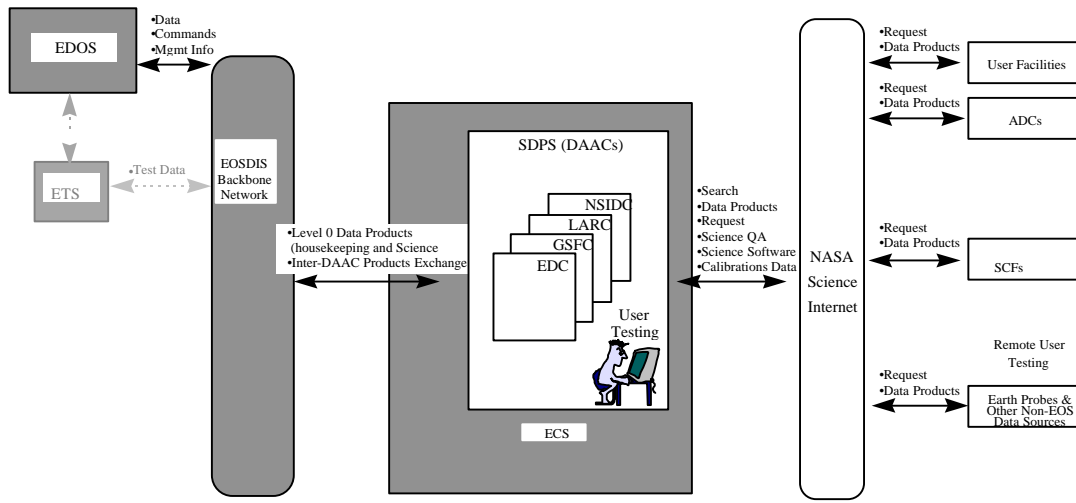- Verify System Administration capabilities.

Test Configuration:

Exhibit 1. Test Configuration

Participants and support requirements:

Participants:

- LDAAC
- CERES SCF
- MISR SCF
- MOPITT SCF
- EDOS
- Support from GDAAC, NDAAC, and EDAAC

Communications:

Voice: Telephone

Data: EBnet, NSI, D3 tapes (via mail)

Equipment and Software:

Hardware: TBD

Software: TBD

Test Tools: TBD

Requirements:

DADS0010	DADS0020	DADS0120	DADS0130	DADS0250	DADS0440
DADS0490	DADS0530	DADS0535	DADS0910	DADS1100	DADS1450
DADS1472	DADS2070	DADS2100	DADS2110	DADS2120	DADS2330
DADS2340	DADS2370	DADS2440	DADS2490	DADS2510	DADS2530
DADS2580	EOSD0020	EOSD0030	ESN-1180	IMS-0040	IMS-0100
IMS-0160	IMS-0210	IMS-0230	IMS-0450	IMS-0510	IMS-0890
IMS-0910	IMS-1080	NI-0360	NI-0365	NI-0370	PGS-0165
PGS-0180	PGS-0250	PGS-0270	PGS-0360	PGS-0410	PGS-0456
PGS-0457	PGS-0490	PGS-0500	PGS-0510	PGS-0560	PGS-0590
PGS-1050	PGS-1060	PGS-1080	PGS-1090	PGS-1100	PGS-1110
PGS-1120	PGS-1130	PGS-1140	PGS-1170	PGS-1175	PGS-1180
SCF-0200	SCF-0210	SCF-0220	SCF-0230	SCF-0240	SCF-0250
SDPS0015	SDPS0016	SDPS0020	SDPS0050	SDPS0130	SMC-1330
SMC-1345	SMC-3350				

Test Cases:

10.1 Creation of Subscription for MISR Data Products.

10.2 Ingest and Archive of MISR L0 Data and L0 Expedited Data.

10.3 Production Planning and Product Generation for MISR.

10.4 Distribution of MISR Products for Subscriptions.

10.5 MISR User Access, Search and One-Time Order and Distribution.

10.6 Failure Recovery for MISR Processing.

10.7 Creation of Subscription for MOPITT Data Products.

10.8 Ingest and Archive of MOPITT L0 Data and L0 Expedited Data.

10.9 Transfer of MOPITT L0 Data to SCF and Ingest of MOPITT Products from SCF.

10.10 Distribution of MOPITT products for Subscriptions.

10.11 MOPITT User Access, Search and One-Time Order and Distribution.

10.12 Ingest and Archive of Ancillary Data.

10.13 Concurrent ingest, archive, processing and distribution for CERES, MISR and MOPITT.

10.14 Add/Modify ESDTs.

10.15 Processing Science Algorithm Processing Change and SSI&T for New PGE.

10.16 Mode Management.

10.17 System Administration.

      10.17.1 Add, Delete and Modify Internal User.

      10.17.2 Trouble Ticketing.

      10.17.3 System Startup and System Shutdown.

      10.17.4 Backup and Recovery.

      10.17.5 Recovery from a Network Failure.

      10.17.6 Reports Generation.

10.18 Creation of Subscription for CERES Data Products - ON HOLD

10.19 Ingest and Archive of CERES L0 Data and L0 Expedited Data - ON HOLD

10.20 Product Generation for CERES on LaTIS - ON HOLD

10.21 Distribution of CERES Products via LaTIS- ON HOLD

10.22 Failure Recovery for CERES Processing - ON HOLD

Test Case Descriptions and Procedures:

10.1 Creation of Subscription for MISR Data Products

Description: This test case will demonstrate the ECS user's and the MISR SCF's ability to subscribe to MISR data products verbally (ftp pull, media and ftp push). The user will make the verbal request and the M&O personnel will submit the subscription.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: (TBD)	

Test Execution:

Step	Station	Action	Expected Results	Comments
		Ftp pull subscription using email request (to MISR SCF)		
2.001	LDAAC	Receive Data Subscription Request email from the MISR SCF.	Subscription request for MISR data products is received.	Email format is in the ICD Between ECS and SCF (505-41-33).
2.002	LDAAC	Deliver a Data Subscription Request Acknowledgment email to the MISR SCF.		Email format is in the ICD Between ECS and SCF (505-41-33).
2.003	LDAAC	Start the User Services Desktop.	The User Services Desktop is started.	
2.004	LDAAC	On the User Services Desktop, click the **Subscription Service** icon.	The Subscription Service screen is displayed.	
2.005	LDAAC	Click on the **Add Subscription** button.	The Add/Edit Subscriptions screen is displayed.	
2.006	LDAAC	Click on the **Browse Events** button.	The Browse Events screen is displayed.	
2.007	LDAAC	Click on the **Find** field.	The cursor appears in the Find entry field.	
2.008	LDAAC	Type TBD and then click on the **Find** button.	The desired event is highlighted in the Event Information window.	TBD will be a type of MISR data product.
2.009	LDAAC	Click on the **OK** button.	The Browse Events screen is closed. The cursor is in the User ID field.	
2.010	LDAAC	Type <**user_id**> then hit **enter**.	The cursor moves to the Email Address field.	
2.011	LDAAC	Type <**email_address**> then hit **enter**.	The cursor moves to the Email Text field.	

Step	Station	Action	Expected Results	Comments
2.012	LDAAC	Type email text then hit **enter**.	The cursor moves to the first box in the Start Date field.	
2.013	LDAAC	Type **<start_date>**.	The start date appears in the Start Date field.	
2.014	LDAAC	Click on the first box of the **Expiration Date** field.	The cursor moves to Expiration Date field.	
2.015	LDAAC	Type **<expiration_date>**.	The expiration date appears in the Expiration Date field.	The expiration date should be set so that the subscription duration covers the period in which the data are likely to reach the archive.
2.016	LDAAC	Click on the **Submit** button.	The Add/Edit Subscriptions window is closed. The new subscription is displayed in the Subscription Information window.	
2.017	LDAAC	Click on the subscription just created to highlight it then click on **Edit Subscription** button.	The subscription just created is displayed.	
2.018	LDAAC	Verify information in the new subscription is correct.	The information displayed corresponds to the information typed in the previous steps.	
2.019	LDAAC	Click **File → Exit**.	The Subscription Service screen is closed.	This test will not be complete until distribution of MISR data products in test case 10.5.
Media subscription using verbal request.				
2.020	LDAAC	Receive verbal request from ECS user for subscription to MISR data product. Record the following information from the ECS user: UserID email address email text start date expiration date event ID	The specified info is recorded.	
2.021	LDAAC	Start the User Services Desktop.	The User Services Desktop is started.	
2.022	LDAAC	On the User Services Desktop, click the **Subscription Service** icon.	The Subscription Service screen is displayed.	

Step	Station	Action	Expected Results	Comments
2.023	LDAAC	Click on the **Add Subscription** button.	The Add/Edit Subscriptions screen is displayed.	
2.024	LDAAC	Click on the **Browse Events** button.	The Browse Events screen is displayed.	
2.025	LDAAC	Click on the **Find** field.	The cursor appears in the Find entry field.	
2.026	LDAAC	Type TBD and then click on the **Find** button.	The desired event is highlighted in the Event Information window.	TBD will be a type of MISR data product.
2.027	LDAAC	Click on the **OK** button.	The Browse Events screen is closed. The cursor is in the User ID field.	
2.028	LDAAC	Type **<user_id>** then hit **enter**.	The cursor moves to the Email Address field.	
2.029	LDAAC	Type **<email_address>** then hit **enter**.	The cursor moves to the Email Text field.	
2.030	LDAAC	Type email text then hit **enter**.	The cursor moves to the first box in the Start Date field.	
2.031	LDAAC	Type **<start_date>**.	The start date appears in the Start Date field.	
2.032	LDAAC	Click on the first box of the **Expiration Date** field.	The cursor moves to Expiration Date field.	
2.033	LDAAC	Type **<expiration_date>**.	The expiration date appears in the Expiration Date field.	The expiration date should be set so that the subscription duration covers the period in which the data are likely to reach the archive.
2.034	LDAAC	Click on the **Actions** button.	The Actions window is displayed.	
2.035	LDAAC	Click on the **8 MM tape** radio button.	The 8 MM tape radio button is recessed.	
2.036	LDAAC	Click in the **User Profile** field.	The cursor moves to the User Profile field.	
2.037	LDAAC	Type **<user_profile>**.	The User Profile name appears in the User Profile field.	
2.038	LDAAC	Click in the **User Name** field.	The cursor moves to the User Name field.	
2.039	LDAAC	Type **<user_name>**.	The User Name appears in the User Name field.	
2.040	LDAAC	Click in the **User Password** field.	The cursor moves to the User Password field.	
2.041	LDAAC	Type **<user_password>**.	Asterisks will appear in the User Password field.	

Step	Station	Action	Expected Results	Comments
2.042	LDAAC	Click in the **Verify Password** field.	The cursor moves to the Verify Password field.	
2.043	LDAAC	Type **<user_password>**.	Asterisks will appear in the Verify Password field.	
2.044	LDAAC	Click the **OK** button.	The Actions window closes and the Add/Edit Subscription window is displayed.	
2.045	LDAAC	Click the **Submit** button.	The Add/Edit Subscription window is closed. The new subscription is displayed in the Subscription Information window.	
2.046	LDAAC	Click on the subscription just created to highlight it then click on **Edit Subscription** button.	The subscription just created is displayed.	
2.047	LDAAC	Verify information in the new subscription is correct.	The information displayed corresponds to the information typed in the previous steps.	
2.048	LDAAC	Click **File → Exit**.	The Subscription Service screen is closed.	This test will not be complete until distribution of MISR data products in test case 10.5.
		Ftp push subscription using verbal request		
2.049	LDAAC	Receive verbal request from ECS user for subscription to MISR data product. Record the following information from the ECS user: UserID email address email text start date expiration date event ID	The specified info is recorded.	
2.050	LDAAC	Start the User Services Desktop.	The User Services Desktop is started.	
2.051	LDAAC	On the User Services Desktop, click the **Subscription Service** icon.	The Subscription Service screen is displayed.	
2.052	LDAAC	Click on the **Add Subscription** button.	The Add/Edit Subscriptions screen is displayed.	
2.053	LDAAC	Click on the **Browse Events** button.	The Browse Events screen is displayed.	

Step	Station	Action	Expected Results	Comments
2.054	LDAAC	Click on the **Find** field.	The cursor appears in the Find entry field.	
2.055	LDAAC	Type TBD and then click on the **Find** button.	The desired event is highlighted in the Event Information window.	TBD will be a type of MISR data product.
2.056	LDAAC	Click on the **OK** button.	The Browse Events screen is closed. The cursor is in the User ID field.	
2.057	LDAAC	Type **<user_id>** then hit **enter**.	The cursor moves to the Email Address field.	
2.058	LDAAC	Type **<email_address>** then hit **enter**.	The cursor moves to the Email Text field.	
2.059	LDAAC	Type email text then hit **enter**.	The cursor moves to the first box in the Start Date field.	
2.060	LDAAC	Type **<start_date>**.	The start date appears in the Start Date field.	
2.061	LDAAC	Click on the first box of the **Expiration Date** field.	The cursor moves to Expiration Date field.	
2.062	LDAAC	Type **<expiration_date>**.	The expiration date appears in the Expiration Date field.	The expiration date should be set so that the subscription duration covers the period in which the data are likely to reach the archive.
2.063	LDAAC	Click on the **Actions** button.	The Actions window is displayed.	
2.064	LDAAC	Click on the **Ftp Push** radio button.	The Ftp Push radio button is recessed.	
2.065	LDAAC	Click in the **User Profile** field.	The cursor moves to the User Profile field.	
2.066	LDAAC	Type **<user_profile>**.	The User Profile name appears in the User Profile field.	
2.067	LDAAC	Click in the **User Name** field.	The cursor moves to the User Name field.	
2.068	LDAAC	Type **<user_name>**.	The User Name appears in the User Name field.	
2.069	LDAAC	Click in the **User Password** field.	The cursor moves to the User Password field.	
2.070	LDAAC	Type **<user_password>**.	Asterisks will appear in the User Password field.	
2.071	LDAAC	Click in the **Verify Password** field.	The cursor moves to the Verify Password field.	
2.072	LDAAC	Type **<user_password>**.	Asterisks will appear in the Verify Password field.	

Step	Station	Action	Expected Results	Comments
2.073	LDAAC	Click in the **Host Name** field.	The cursor moves to the Host Name field.	
2.074	LDAAC	Type **<host_name>**.	The Host Name appears in the Host Name field.	
2.075	LDAAC	Click in the **Destination** field.	The cursor moves to the Destination field.	
2.076	LDAAC	Type **<destination>**.	The Destination appears in the Destination field.	
2.077	LDAAC	Click the **OK** button.	The Actions window closes and the Add/Edit Subscription window is displayed.	
2.078	LDAAC	Click the **Submit** button.	The Add/Edit Subscription window is closed. The new subscription is displayed in the Subscription Information window.	
2.079	LDAAC	Click on the subscription just created to highlight it then click on **Edit Subscription** button.	The subscription just created is displayed.	
2.080	LDAAC	Verify information in the new subscription is correct.	The information displayed corresponds to the information typed in the previous steps.	
2.081	LDAAC	Click **File → Exit**.	The Subscription Service screen is closed.	This test will not be complete until distribution of MISR data products in test case 10.5.

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001	LDAAC	Exit all windows and shutdown User Services Desktop.	User Services Desktop exits.	

10.2 Ingest and Archive of MISR L0 Data and L0 Expedited Data

Description: This test case will demonstrate the LDAAC's ability to ingest and archive MISR L0 data and L0 expedited data. The LDAAC will receive the MISR L0 data via electronic transfer, ingest the MISR L0 data into the LDAAC_ECS and archive the MISR L0 data into the LDAAC_ECS.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	
1.002	LDAAC	Verify the polling process is running for EDOS.	The polling process is running.	

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001	LDAAC	Start the Ingest GUI. Refer to Section 16.1.1 of the Mission Operation Procedures document (611-CD-006-001).	The Ingest Intro screen is displayed.	
2.002	EDOS	In an xterm window, ftp MISR PDS data file to polling directory.	The data file appears in directory listing.	IP address - TBD directory - /usr/ecs/<MODE>/CUSTOM/bin/PollEDOS
2.003	EDOS	ftp MISR PDS delivery record to polling directory.	The delivery record appears in directory listing.	IP address - TBD directory - /usr/ecs/<MODE>/CUSTOM/bin/PollEDOS
2.004	EDOS	ftp the signal file associated with the PDS delivery record to polling directory.	The signal file appears in directory listing.	IP address - TBD directory - /usr/ecs/<MODE>/CUSTOM/bin/PollEDOS
2.005	LDAAC	Monitor data transfer to DAAC system.	The data appears in staging directory listing.	directory - TBD
2.006	LDAAC	In Ingest GUI window, click on **Monitor/Control** tab.	Monitor/Control screen is displayed.	
2.007	LDAAC	Monitor data ingest.	Data ingest is completed.	
2.008	LDAAC	Transmit PAN to EDOS.	The PAN will be transmitted to EDOS within 15 min + 15 min/GB of data from time of successful receipt.	
2.009	LDAAC	Use the Ingest History Log GUI to verify that data was ingested. Refer to Section 16.1.2 of the Mission Operation Procedures document (611-CD-006-001).	The entry in the Ingest History Log corresponds to the listing in the DAAC destination directory (TBD).	

2.010	LDAAC	Monitor archive of PDS data file and PDR. Refer to Section 17.6.3 of the Mission Operation Procedures document (611-CD-006-001).	Archive is completed.	
2.011	LDAAC	Remote login to the Archive SQL Server machine by typing: **rlogin l0acg02_svr** **<user_id>** **<user_password>**	Operating system prompt is displayed.	
2.012	LDAAC	Enter the Sybase database by typing: **isql -U <sybase_id>** **<sybase_password>**	sql prompt is displayed.	
2.013	LDAAC	Type **cd** **/usr/ecs/OPS/COTS/sybase** **/scripts**	The current working directory is /usr/ecs/OPS/COTS/sybase/scripts.	
2.014	LDAAC	Query the Archive database table by typing: **<TBD>**	The query results are displayed.	
2.015	LDAAC	Verify an entry exists in the Archive database table for the data.	An entry is displayed corresponding to the data.	
2.016	LDAAC	Query the Science Data database table by typing: **<TBD>**	The query results are displayed.	
2.017	LDAAC	Verify an entry exists in the Science Data database table for the metadata.	An entry is displayed corresponding to the metadata.	

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001	LDAAC	Exit all windows and shutdown Ingest GUI.	Ingest GUI exits.	

10.3 Production Planning and Product Generation for MISR

Description: This test case will demonstrate the LDAAC's ability to create a Production Request, activate a production plan, track a PGE using AutoSys, process the MISR L0 data to produce MISR L1A and L1B products, complete operational QA of the products and archive the products and QA information in LDAAC_ECS. Distribution to the MISR SCF for science QA by MISR team

members, return of QA metadata to LDAAC_ECS and updating of science QA metadata within LDAAC_ECS will also be demonstrated.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001	LDAAC	Submit a Production Request. Refer to Section 13.1.2 of the Mission Operation Procedures document (611-CD-006-001).	Production Request is created and one or more DPR's are generated.	PR specifics TBS.
2.002	LDAAC	Review DPR's related to new PR. Refer to Section 13.1.4 of the Mission Operation Procedures document (611-CD-006-001).	The DPR's from the PR will be listed in the DPR List tab.	
2.003	LDAAC	Create a production plan which includes the DPR's. Refer to Section 13.2.2 of the Mission Operation Procedures document (611-CD-006-001).	DPR's will be successfully incorporated into a production plan.	
2.004	LDAAC	Click in the **Production Planning Timeline** window.	The Production Planning Timeline window is displayed.	
2.005	LDAAC	Review the Production Plan Timeline for the plan created above by selecting **Plan →** *plan_name* from the pull down menu.	The plan created above is shown on the Production Plan Timeline.	*plan_name* is the name of the plan created above.
2.006	LDAAC	Launch AutoSys by double clicking on the **AutoSys** icon.	AutoSys GUI Control Panel is displayed.	
2.007	LDAAC	Click the **JobScape** button.	JobScape window is displayed.	
2.008	LDAAC	Monitor the status of the jobs for the plan created above displayed in the **JobScape** window until jobs are completed.	All jobs for the plan created above have a status of success.	

Step	Station	Action	Expected Results	Comments
2.009	LDAAC	Verify the product is generated.	The product is generated.	The location of the product file is TBD (dependent upon PGE).
2.010	LDAAC	Perform operational QA of the product. Refer to Section 15.2 of the Mission Operation Procedures document (611-CD-006-001).		
2.011	LDAAC	Remote login to the Archive SQL Server machine by typing: **rlogin l0acg02_svr <user_id> <user_password>**	Operating system prompt is displayed.	
2.012	LDAAC	Enter the Sybase database by typing: **isql -U <sybase_id> <sybase_password>**	sql prompt is displayed.	
2.013	LDAAC	Type **cd /usr/ecs/OPS/COTS/sybase /scripts**	The current working directory is /usr/ecs/OPS/COTS/sybase/ scripts.	
2.014	LDAAC	Query the Archive database table by typing: **<TBD>**	The query results are displayed.	
2.015	LDAAC	Verify an entry exists in the Archive database table for the product.	An entry is displayed corresponding to the product.	
2.016	LDAAC	Query the Science Data database table by typing: **<TBD>**	The query results are displayed.	
2.017	LDAAC	Verify an entry exists in the Science Data database table for the metadata.	An entry is displayed corresponding to the metadata.	
2.018	LDAAC	Deliver Distribution Notice email that notifies the SCF that the QA Data Subscription data has been staged.	The SCF receives the Distribution Notice.	
2.019	SCF	Retrieve product and perform Science QA.		
2.020	SCF	Scientist sends email to LDAAC including changes to be made to update the Science QA flag and explanation.		

Step	Station	Action	Expected Results	Comments
2.021	LDAAC	Log into the QA Monitor GUI machine. Type: **telnet l0sps03** **<user_id>** **<password>**	Operating system prompt is displayed.	
2.022	LDAAC	Setup environment variables and log into dce. Type: **>setenv DISPLAY** **<ip_address>:0.0** **>setenv ECS_HOME** **/usr/ecs/** **>dce_login** **<dce_login_id>** **<dce_password>**	Operating system prompt is displayed.	
2.023	LDAAC	Start the QA Monitor GUI. Type: **cd** **/usr/ecs/<MODE>/CUSTOM/** **utilities** **EcDpPrStartQaMonitorGUI** **<MODE> <AP_ID>**	QA Monitor GUI is displayed.	AP ID = 1 thru 5 valid picks
2.024	LDAAC	Click on **Datatype TBD**	Datatype is highlighted.	
2.025	LDAAC	Click in the **Date Field** and type the begin date **10/01/1990** and end date of **10/01/1999**	Dates are displayed in the Date Field.	
2.026	LDAAC	Click **Query**.	The list of metadata matching the criteria searched with is displayed.	
2.027	LDAAC	Click on **<data_granule_name>**.	The data granule will be highlighted.	data_granule_name = name of data granule added in previous steps.
2.028	LDAAC	Click on **Update Metadata** button.	The Update Metadata screen is displayed.	
2.029	LDAAC	Click and hold the mouse button down on the **SCF Quality** button and select **Being Investigated** by releasing the mouse button.	The SCF Quality tag is set to Being Investigated.	
2.030	LDAAC	Click in the Explanation field and type **L-EGS10 Testing - Test Case 10.3**.	L-EGS10 Testing appears in the explanation field.	
2.031	LDAAC	Click **OK**.	The updated metadata is stored in the SDSRV.	
2.032	LDAAC	Click **OK**.	The QA Monitor GUI exits.	

Step	Station	Action	Expected Results	Comments
2.033	LDAAC	Remote login to the Archive SQL Server machine by typing: **rlogin l0acg02_svr <user_id> <user_password>**	Operating system prompt is displayed.	
2.034	LDAAC	Enter the Sybase database by typing: **isql -U <sybase_id> <sybase_password>**	sql prompt is displayed.	
2.035	LDAAC	Type **cd /usr/ecs/OPS/COTS/sybase /scripts**	The current working directory is /usr/ecs/OPS/COTS/sybase/ scripts.	
2.036	LDAAC	Query the Science Data database table by typing: **<TBD>**	The query results are displayed.	
2.037	LDAAC	Verify that the SCF QA flag of the metadata is updated in the Science Data database table.	An entry is displayed corresponding to the metadata.	
2.038	LDAAC	Query the Archive database table by typing: **<TBD>**	The query results are displayed.	
2.039	LDAAC	Verify an entry exists in the Archive database table for the product.	An entry is displayed corresponding to the product.	
2.040	LDAAC	Query the Science Data database table by typing: **<TBD>**	The query results are displayed.	
2.041	LDAAC	Verify an entry exists in the Science Data database table for the updated metadata.	An entry is displayed corresponding to the updated metadata.	

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001	LDAAC	Exit all windows and shutdown Production Planning and AutoSys GUI.	Production Planning and AutoSys GUI exits.	

10.4 Distribution of MISR Products for Subscriptions

Description: This test case will demonstrate LDAAC's ability to distribute MISR L1A and L1B products using subscription service and the ECS user's ability to inspect MISR L1A and L1B products using ECS client, HDF, and other inspection tools.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	

Test Execution:

Step	Station	Action	Expected Results	Comments
Ftp pull subscription using email request (to MISR SCF)				
2.001	LDAAC	Send Data Subscription Event Notification to notify the MISR SCF that the event they subscribed to occurred.		The event the MISR SCF subscribed to in this case is the generation of the MISR data product requested.
2.002	MISR SCF	Submit order for the MISR data product using B0SOT.		
2.003	LDAAC	Receive the product order.		
2.004	LDAAC	Process the product order.	The data is staged on the \<tbd\> directory.	
2.005	LDAAC	Send "Distribution Notice" to notify the MISR SCF that the requested data has been staged.		
2.006	LDAAC	Verify email notification is received by the MISR SCF.		
2.007	MISR SCF	Ftp pull the staged data product.	The MISR SCF receives the requested data product.	
2.008	LDAAC	Verify that the data product has been received by the MISR SCF.		
Media subscription using verbal request.				
2.009	LDAAC	The data product subscribed to in test case 10.2 is distributed via tape media.	The ECS users receive data product via tape media as requested in the subscription.	Detailed steps are TBD.
Ftp push subscription using verbal request				
2.010	LDAAC	The data product subscribed to in test case 10.2 is distributed via ftp push.	The ECS users receive data product via ftp push as requested in the subscription.	Detailed steps are TBD.

| 2.011 | LDAAC | Verify all data products have been distributed using the ECS Data Distribution Operator GUI. Refer to Section 18.1.2 of the Mission Operation Procedures document (611-CD-006-001). | | |
| 2.012 | LDAAC | Inspect the data products received using ECS Client, HDF, or other inspection tools. | | |

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001	LDAAC	Exit all windows and shutdown the ECS Data Distribution Operator GUI.	The ECS Data Distribution Operator GUI exits.	

10.5 MISR User Access, Search and One-Time Order and Distribution

Description: This test case will demonstrate the ECS user's ability to search for and order MISR L1A and L1B products verbally and using the ECS client. It will also demonstrate LDAAC's ability to distribute MISR L1A and L1B products and the ECS user's ability to inspect MISR L1A and L1B products using ECS client, HDF, and other inspection tools.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	

Test Execution:

Step	Station	Action	Expected Results	Comments
Guide Search using the ECS Client				
2.001	Science User	Double click on the **B0SOT** icon.	B0SOT is displayed.	
2.002	Science User	Click on the **Go To** menu item.	A pulldown menu is displayed.	
2.003	Science User	Select **Search Screen** from the pulldown menu.	The Search Screen is displayed.	

2.004	Science User	Click on the radio button next to **Guide Search**.	The Guide Search radio button is recessed.	
2.005	Science User	Type the search criteria into the appropriate fields.		Search criteria is TBD.
2.006	Science User	Click the **Execute Search** button at the bottom of the screen.	The Communication Status window is displayed.	
2.007	Science User	Monitor the search by observing the status in the Communication Status window.	The search is complete when the status of Complete is displayed.	
		Inventory Search and Order (ftp pull) using the ECS Client		
2.008	Science User	Double click on the **B0SOT** icon.	B0SOT is displayed.	
2.009	Science User	Click on the **Go To** menu item.	A pulldown menu is displayed.	
2.010	Science User	Select **Search Screen** from the pulldown menu.	The Search Screen is displayed.	
2.011	Science User	Click on the radio button next to **Inventory Search**.	The Inventory Search radio button is recessed.	
2.012	Science User	Type the search criteria into the appropriate fields.		Search criteria is TBD.
2.013	Science User	Click the **Execute Search** button at the bottom of the screen.		
2.014	Science User	Monitor the search by observing the status in the Communication Status window.	The search is complete when the status of Complete is displayed.	
2.015	Science User	After the search is complete, click the **Data** button for the <tbd> data.		
2.016	Science User	Click in the **O** column corresponding to the <tbd> granules.		
2.017	Science User	Click the **Order Data** button.		
2.018	Science User	Click on **Package ID and Package Options**.	The Package Options Selection Screen appears.	
2.019	Science User	Select the **Package Options**.		Options - TBD (ftp pull should be included)
2.020	Science User	Click the **OK** button.		
2.021	Science User	On the Order Data Screen, click the **Submit Order** button.	LDAAC receives the submitted order.	

2.022	LDAAC	Process the product order.	The data is staged on the <tbd> directory.	
2.023	LDAAC	Send "Distribution Notice" to notify the user that the requested data has been staged.		
2.024	LDAAC	Verify email notification is received by the user.		
2.025	Science User	Ftp pull the staged data product.	The user receives the requested data product.	
2.026	LDAAC	Verify that the data product has been received by the user.		
2.027	Science User	Inspect the data product received using ECS Client, HDF, or other inspection tools.		
		Directory Search and Order (media) using the ECS Client		
2.028	Science User	Double click on the **B0SOT** icon.	B0SOT is displayed.	
2.029	Science User	Click on the **Go To** menu item.	A pulldown menu is displayed.	
2.030	Science User	Select **Search Screen** from the pulldown menu.	The Search Screen is displayed.	
2.031	Science User	Click on the radio button next to **Directory Search**.	The Directory Search radio button is recessed.	
2.032	Science User	Type the search criteria into the appropriate fields.		Search criteria is TBD.
2.033	Science User	Click the **Execute Search** button at the bottom of the screen.		
2.034	Science User	Monitor the search by observing the status in the Communication Status window.	The search is complete when the status of Complete is displayed.	
2.035	Science User	After the search is complete, click the **Data** button for the <tbd> data.		
2.036	Science User	Click in the **O** column corresponding to the <tbd> granules.		
2.037	Science User	Click the **Order Data** button.		
2.038	Science User	Click on **Package ID and Package Options**.	The Package Options Selection Screen appears.	
2.039	Science User	Select the **Package Options**.		Options - TBD (tape media should be included)

2.040	Science User	Click the **OK** button.		
2.041	Science User	On the Order Data Screen, click the **Submit Order** button.	LDAAC receives the submitted order.	
2.042	LDAAC	Process the product order.		Detailed steps are TBD. Is an email notification sent? Or is just the tape sent?
2.043	LDAAC	Verify that the data product has been received by the user.		
2.044	Science User	Inspect the data product received using ECS Client, HDF, or other inspection tools.		
		Verbal Request (ftp push)		
2.045	LDAAC	Receive verbal request from user for subscription to MISR data product. Record the following information from the ECS user: UserID email address email text start date expiration date event ID	The specified info is recorded.	
2.046	LDAAC	Log the request for data in the User Contact Log. . Refer to Section 19.2.1 of the Mission Operation Procedures document (611-CD-006-001).	An entry is created in the User Contact Log	ECS user info TBD.
2.047	LDAAC	Launch the ECS User Account Management tool to validate the user. Refer to Section 19.2.2 of the Mission Operation Procedures document (611-CD-006-001).	The user info is displayed in the ECS User Account Management tool.	
2.048	LDAAC	Double click on the **B0SOT** icon.	B0SOT is displayed.	
2.049	LDAAC	Click on the **Go To** menu item.	A pulldown menu is displayed.	
2.050	LDAAC	Select **Search Screen** from the pulldown menu.	The Search Screen is displayed.	

2.051	LDAAC	Click on the radio button next to Inventory Search.	The Inventory Search radio button is recessed.	
2.052	LDAAC	Type the search criteria into the appropriate fields.		Search criteria is TBD.
2.053	LDAAC	Click the **Execute Search** button at the bottom of the screen.		
2.054	LDAAC	Monitor the search by observing the status in the Communication Status window.	The search is complete when the status of Complete is displayed.	
2.055	LDAAC	After the search is complete, click the **Data** button for the <tbd> data.		
2.056	LDAAC	Click in the O column corresponding to the <tbd> granules.		
2.057	LDAAC	Click the **Order Data** button.		
2.058	LDAAC	Click on **Package ID and Package Options**.	The Package Options Selection Screen appears.	
2.059	LDAAC	Select the **Package Options**.		Options - TBD (ftp push should be included)
2.060	LDAAC	Click the **OK** button.		
2.061	LDAAC	On the Order Data Screen, click the **Submit Order** button.	LDAAC receives the submitted order.	
2.062	LDAAC	Process the product order.		Detailed steps are TBD.
2.063	LDAAC	Verify that the data product has been received by the user.		
2.064	LDAAC	Inspect the data product received using ECS Client, HDF, or other inspection tools.		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001	LDAAC	Exit all windows and shutdown the ECS Data Distribution Operator GUI.	The ECS Data Distribution Operator GUI exits.	

10.6 Failure Recovery for MISR Processing

Description: This test case will demonstrate the LDAAC's ability to recover and resume MISR processing in the event of a power outage, server failure, network disconnect (?) or necessary operator intervention (e.g. due to ECS system/subsystem hang). This test case will also verify MISR processing resumes at the appropriate stage. The instances of failure will occur at L0 ingest, ancillary ingest, and L0-L1A-L1B processing and a Trouble Ticket will be completed and submitted.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001		TBS		

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		TBS		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		TBS		

10.7 Creation of Subscription for MOPITT Data Products

Description: This test case will demonstrate the ECS user's and the MOPITT SCF's ability to subscribe to MOPITT data products (ftp push, media and ftp pull). The user will make the verbal request and the M&O personnel will submit the subscription.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: (TBD)	

Test Execution:

Step	Station	Action	Expected Results	Comments
Ftp push subscription using verbal request				

2.001	LDAAC	Receive verbal request from ECS user for subscription to MOPITT data product. Record the following information from the ECS user: UserID email address email text start date expiration date event ID	The specified info is recorded.	
2.002	LDAAC	Start the User Services Desktop.	The User Services Desktop is started.	
2.003	LDAAC	On the User Services Desktop, click the **Subscription Service** icon.	The Subscription Service screen is displayed.	
2.004	LDAAC	Click on the **Add Subscription** button.	The Add/Edit Subscriptions screen is displayed.	
2.005	LDAAC	Click on the **Browse Events** button.	The Browse Events screen is displayed.	
2.006	LDAAC	Click on the **Find** field.	The cursor appears in the Find entry field.	
2.007	LDAAC	Type TBD and then click on the **Find** button.	The desired event is highlighted in the Event Information window.	TBD will be a type of MOPITT data product.
2.008	LDAAC	Click on the **OK** button.	The Browse Events screen is closed. The cursor is in the User ID field.	
2.009	LDAAC	Type **<user_id>** then hit **enter**.	The cursor moves to the Email Address field.	
2.010	LDAAC	Type **<email_address>** then hit **enter**.	The cursor moves to the Email Text field.	
2.011	LDAAC	Type email text then hit **enter**.	The cursor moves to the first box in the Start Date field.	
2.012	LDAAC	Type **<start_date>**.	The start date appears in the Start Date field.	
2.013	LDAAC	Click on the first box of the **Expiration Date** field.	The cursor moves to Expiration Date field.	
2.014	LDAAC	Type **<expiration_date>**.	The expiration date appears in the Expiration Date field.	The expiration date should be set so that the subscription duration covers the period in which the data are likely to reach the archive.
2.015	LDAAC	Click on the **Actions** button.	The Actions window is displayed.	

2.016	LDAAC	Click on the **Ftp Push** radio button.	The Ftp Push radio button is recessed.	
2.017	LDAAC	Click in the **User Profile** field.	The cursor moves to the User Profile field.	
2.018	LDAAC	Type **<user_profile>**.	The User Profile name appears in the User Profile field.	
2.019	LDAAC	Click in the **User Name** field.	The cursor moves to the User Name field.	
2.020	LDAAC	Type **<user_name>**.	The User Name appears in the User Name field.	
2.021	LDAAC	Click in the **User Password** field.	The cursor moves to the User Password field.	
2.022	LDAAC	Type **<user_password>**.	Asterisks will appear in the User Password field.	
2.023	LDAAC	Click in the **Verify Password** field.	The cursor moves to the Verify Password field.	
2.024	LDAAC	Type **<user_password>**.	Asterisks will appear in the Verify Password field.	
2.025	LDAAC	Click in the **Host Name** field.	The cursor moves to the Host Name field.	
2.026	LDAAC	Type **<host_name>**.	The Host Name will appear in the Host Name field.	
2.027	LDAAC	Click in the **Destination** field	The cursor moves to the Destination field.	
2.028	LDAAC	Type **<destination>**.	The Destination will appear in the Destination field.	
2.029	LDAAC	Click the **OK** button.	The Actions window closes and the Add/Edit Subscription window is displayed.	
2.030	LDAAC	Click the **Submit** button.	The Add/Edit Subscription window is closed. The new subscription is displayed in the Subscription Information window.	
2.031	LDAAC	Click on the subscription just created to highlight it then click on **Edit Subscription** button.	The subscription just created is displayed.	
2.032	LDAAC	Verify information in the new subscription is correct.	The information displayed corresponds to the information typed in the previous steps.	

2.033	LDAAC	Click **File → Exit**.	The Subscription Service screen is closed.	This test will not be complete until distribution of MOPITT data products in test case 10.11.
		Media subscription using verbal request		
2.034	LDAAC	Receive verbal request from ECS user for subscription to MOPITT data product. Record the following information from the ECS user: UserID email address email text start date expiration date event ID	The specified info is recorded.	
2.035	LDAAC	Start the User Services Desktop.	The User Services Desktop is started.	
2.036	LDAAC	On the User Services Desktop, click the **Subscription Service** icon.	The Subscription Service screen is displayed.	
2.037	LDAAC	Click on the **Add Subscription** button.	The Add/Edit Subscriptions screen is displayed.	
2.038	LDAAC	Click on the **Browse Events** button.	The Browse Events screen is displayed.	
2.039	LDAAC	Click on the **Find** field.	The cursor appears in the Find entry field.	
2.040	LDAAC	Type TBD and then click on the **Find** button.	The desired event is highlighted in the Event Information window.	TBD will be a type of MOPITT data product.
2.041	LDAAC	Click on the **OK** button.	The Browse Events screen is closed. The cursor is in the User ID field.	
2.042	LDAAC	Type **<user_id>** then hit **enter**.	The cursor moves to the Email Address field.	
2.043	LDAAC	Type **<email_address>** then hit **enter**.	The cursor moves to the Email Text field.	
2.044	LDAAC	Type email text then hit **enter**.	The cursor moves to the first box in the Start Date field.	
2.045	LDAAC	Type **<start_date>**.	The start date appears in the Start Date field.	
2.046	LDAAC	Click on the first box of the **Expiration Date** field.	The cursor moves to Expiration Date field.	

2.047	LDAAC	Type <**expiration_date**>.	The expiration date appears in the Expiration Date field.	The expiration date should be set so that the subscription duration covers the period in which the data are likely to reach the archive.
2.048	LDAAC	Click on the **Actions** button.	The Actions window is displayed.	
2.049	LDAAC	Click on the **8 MM tape** radio button.	The 8 MM tape radio button is recessed.	
2.050	LDAAC	Click in the **User Profile** field.	The cursor moves to the User Profile field.	
2.051	LDAAC	Type <**user_profile**>.	The User Profile name appears in the User Profile field.	
2.052	LDAAC	Click in the **User Name** field.	The cursor moves to the User Name field.	
2.053	LDAAC	Type <**user_name**>.	The User Name appears in the User Name field.	
2.054	LDAAC	Click in the **User Password** field.	The cursor moves to the User Password field.	
2.055	LDAAC	Type <**user_password**>.	Asterisks will appear in the User Password field.	
2.056	LDAAC	Click in the **Verify Password** field.	The cursor moves to the Verify Password field.	
2.057	LDAAC	Type <**user_password**>.	Asterisks will appear in the Verify Password field.	
2.058	LDAAC	Click the **OK** button.	The Actions window closes and the Add/Edit Subscription window is displayed.	
2.059	LDAAC	Click the **Submit** button.	The Add/Edit Subscription window is closed. The new subscription is displayed in the Subscription Information window.	
2.060	LDAAC	Click on the subscription just created to highlight it then click on **Edit Subscription** button.	The subscription just created is displayed.	
2.061	LDAAC	Verify information in the new subscription is correct.	The information displayed corresponds to the information typed in the previous steps.	

2.062	LDAAC	Click **File → Exit**.	The Subscription Service screen is closed.	This test will not be complete until distribution of MOPITT data products in test case 10.11.
		Ftp pull subscription using email request (to MOPITT SCF)		
2.063	LDAAC	Receive Data Subscription Request email from the MOPITT SCF.	Subscription request for MOPITT data products is received.	Email format is in the ICD Between ECS and SCF (505-41-33).
2.064	LDAAC	Deliver a Data Subscription Request Acknowledgment email to the MOPITT SCF.		Email format is in the ICD Between ECS and SCF (505-41-33).
2.065	LDAAC	Start the User Services Desktop.	The User Services Desktop is started.	
2.066	LDAAC	On the User Services Desktop, click the **Subscription Service** icon.	The Subscription Service screen is displayed.	
2.067	LDAAC	Click on the **Add Subscription** button.	The Add/Edit Subscriptions screen is displayed.	
2.068	LDAAC	Click on the **Browse Events** button.	The Browse Events screen is displayed.	
2.069	LDAAC	Click on the **Find** field.	The cursor appears in the Find entry field.	
2.070	LDAAC	Type TBD and then click on the **Find** button.	The desired event is highlighted in the Event Information window.	TBD will be a type of MOPITT data product.
2.071	LDAAC	Click on the **OK** button.	The Browse Events screen is closed. The cursor is in the User ID field.	
2.072	LDAAC	Type **<user_id>** then hit **enter**.	The cursor moves to the Email Address field.	
2.073	LDAAC	Type **<email_address>** then hit **enter**.	The cursor moves to the Email Text field.	
2.074	LDAAC	Type email text then hit **enter**.	The cursor moves to the first box in the Start Date field.	
2.075	LDAAC	Type **<start_date>**.	The start date appears in the Start Date field.	
2.076	LDAAC	Click on the first box of the **Expiration Date** field.	The cursor moves to Expiration Date field.	
2.077	LDAAC	Type **<expiration_date>**.	The expiration date appears in the Expiration Date field.	The expiration date should be set so that the subscription duration covers the period in which the data are likely to reach the archive.

2.078	LDAAC	Click on the **Submit** button.	The Add/Edit Subscriptions window is closed. The new subscription is displayed in the Subscription Information window.	
2.079	LDAAC	Click on the subscription just created to highlight it then click on **Edit Subscription** button.	The subscription just created is displayed.	
2.080	LDAAC	Verify information in the new subscription is correct.	The information displayed corresponds to the information typed in the previous steps.	
2.081	LDAAC	Click **File → Exit**.	The Subscription Service screen is closed.	This test will not be complete until distribution of MISR data products in test case 10.11.

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001	LDAAC	Exit all windows and shutdown User Services Desktop and ECS User Desktop.	User Services Desktop and ECS User Desktop exit.	

10.8 Ingest and Archive of MOPITT L0 Data and L0 Expedited Data

Description: This test case will demonstrate the LDAAC's ability to ingest and archive MOPITT L0 data and L0 expedited data. The LDAAC will receive the MOPITT L0 data via electronic transfer, ingest the MOPITT L0 data into the LDAAC_ECS and archive the MOPITT L0 data into the LDAAC_ECS.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	
1.002	LDAAC	Verify the polling process is running for EDOS.	The polling process is running.	

Test Execution:

Step	Station	Action	Expected Results	Comments

2.001	LDAAC	Start the Ingest GUI. Refer to Section 16.1.1 of the Mission Operation Procedures document (611-CD-006-001).	The Ingest Intro screen is displayed.	
2.002	EDOS	In an xterm window, ftp MOPITT PDS data file to polling directory.	The data file appears in directory listing.	IP address - TBD directory - /usr/ecs/<MODE>/CUSTOM/bin/PollEDOS
2.003	EDOS	ftp MOPITT PDS delivery record to polling directory.	The delivery record appears in directory listing.	IP address - TBD directory - /usr/ecs/<MODE>/CUSTOM/bin/PollEDOS
2.004	EDOS	ftp the signal file associated with the PDS delivery record to polling directory.	The signal file appears in directory listing.	IP address - TBD directory - /usr/ecs/<MODE>/CUSTOM/bin/PollEDOS
2.005	LDAAC	Monitor data transfer to DAAC system.	The data appears in staging directory listing.	directory - TBD
2.006	LDAAC	In Ingest GUI window, click on **Monitor/Control** tab.	Monitor/Control screen is displayed.	
2.007	LDAAC	Monitor data ingest.	Data ingest is completed.	
2.008	LDAAC	Transmit PAN to EDOS.	The PAN will be transmitted to EDOS within 15 min + 15 min/GB of data from time of successful receipt.	
2.009	LDAAC	Use the Ingest History Log GUI to verify that data was ingested. Refer to Section 16.1.2 of the Mission Operation Procedures document (611-CD-006-001).	The entry in the Ingest History Log corresponds to the listing in the DAAC destination directory (TBD).	
2.010	LDAAC	Monitor archive of PDS data file and PDR. Refer to Section 17.6.3 of the Mission Operation Procedures document (611-CD-006-001).	Archive is completed.	
2.011	LDAAC	Remote login to the Archive SQL Server machine by typing: **rlogin l0acg02_svr <user_id> <user_password>**	Operating system prompt is displayed.	

2.012	LDAAC	Enter the Sybase database by typing: **isql -U <sybase_id> <sybase_password>**	sql prompt is displayed.	
2.013	LDAAC	Type **cd /usr/ecs/OPS/COTS/sybase /scripts**	The current working directory is /usr/ecs/OPS/COTS/sybase/ scripts.	
2.014	LDAAC	Query the Archive database table by typing: **<TBD>**	The query results are displayed.	
2.015	LDAAC	Verify an entry exists in the Archive database table for the data.	An entry is displayed corresponding to the data.	
2.016	LDAAC	Query the Science Data database table by typing: **<TBD>**	The query results are displayed.	
2.017	LDAAC	Verify an entry exists in the Science Data database table for the metadata.	An entry is displayed corresponding to the metadata.	

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001	LDAAC	Exit all windows and shutdown Ingest GUI.	Ingest GUI exits.	

10.9 Transfer of MOPITT L0 Data to SCF and Ingest of MOPITT Products from SCF

Description: This test case will demonstrate the LDAAC's ability to transfer MOPITT L0 data to the SCF and ingest and archive MOPITT L1B and L2 products from the SCF.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	

Test Execution:

Step	Station	Action	Expected Results	Comments
			Transfer of MOPITT L0 data to MOPITT SCF	

2.001	LDAAC	In an xterm window, ftp MOPITT L0 data file to the designated directory.	The data file appears in directory listing.	IP address - TBD directory - TBD
2.002	LDAAC	Ftp PDS Delivery Record to the designated directory.	The delivery record appears in directory listing.	IP address - TBD directory - TBD
2.003	LDAAC	Ftp the signal file associated with the PDS Delivery Record to the designated directory.	The signal file appears in directory listing.	IP address - TBD directory - TBD
2.004	MOPITT SCF	Poll the designated directory.	The PDR is found.	directory - TBD
2.005	MOPITT SCF	Validate the PDR.	The PDR is in the correct format.	
2.006	MOPITT SCF	Ftp pull the L0 data from the directory specified in the PDR.	The MOPITT SCF receives the data files.	
2.007	MOPITT SCF	Deliver PAN to LDAAC.	LDAAC receives the PAN.	
2.008	LDAAC	Verify the MOPITT SCF received the data files and the data files are not corrupted.		
Ingest of MOPITT products from the MOPITT SCF				
2.009	MOPITT SCF	Ftp MOPITT data product file to the designated directory.	The data file appears in directory listing.	IP address - TBD directory - TBD
2.010	MOPITT SCF	Ftp PDS Delivery Record to the designated directory.	The delivery record appears in directory listing.	IP address - TBD directory - TBD
2.011	MOPITT SCF	Ftp the signal file associated with the PDS Delivery Record to the designated directory.	The signal file appears in directory listing.	IP address - TBD directory - TBD
2.012	LDAAC	Poll the designated directory.	The PDR is found.	directory - TBD
2.013	LDAAC	Validate the PDR.	The PDR is in the correct format.	
2.014	LDAAC	Ftp pull the product data from the directory specified in the PDR.	The LDAAC receives the product data files.	
2.015	LDAAC	Deliver PAN to LDAAC.	MOPITT SCF receives the PAN.	
2.016	LDAAC	Verify the LDAAC received the product data files and the data files are not corrupted.		

Test Termination:

Step	Station	Action	Expected Results	Comments

3.001	LDAAC	Exit all windows.		

10.10 Distribution of MOPITT Products for Subscriptions

Description: This test case will demonstrate LDAAC's ability to distribute MOPITT L1B and L2 products using subscription service and the ECS user's ability to inspect MOPITT L1B and L2 products using ECS client, HDF, and other inspection tools.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	

Test Execution:

Step	Station	Action	Expected Results	Comments
		Ftp push subscription using verbal request		
2.001	LDAAC	The data product subscribed to in test case 10.8 is distributed via ftp push.	The ECS users receive data product via ftp push as requested in the subscription.	Detailed steps are TBD.
		Media subscription using verbal request		
2.002	LDAAC	The data product subscribed to in test case 10.8 is distributed via tape media.	The ECS users receive data product via tape media as requested in the subscription.	Detailed steps are TBD.
		Ftp pull subscription using email request (to MOPITT SCF)		
2.003	LDAAC	Send Data Subscription Event Notification to notify the MOPITT SCF that the event they subscribed to occurred.		The event the MOPITT SCF subscribed to in this case is the generation of the MOPITT data product requested.
2.004	MOPITT SCF	Submit order for the MOPITT data product using B0SOT.		
2.005	LDAAC	Receive the product order.		
2.006	LDAAC	Process the product order.	The data is staged on the <tbd> directory.	
2.007	LDAAC	Send "Distribution Notice" to notify the MOPITT SCF that the requested data has been staged.		
2.008	LDAAC	Verify email notification is received by the MOPITT SCF.		

2.009	MOPITT SCF	Ftp pull the staged data product.	The MOPITT SCF receives the requested data product.	
2.010	LDAAC	Verify that the data product has been received by the MOPITT SCF.		
2.011	LDAAC	Verify all data products have been distributed using the ECS Data Distribution Operator GUI. Refer to Section 18.1.2 of the Mission Operation Procedures document (611-CD-006-001).		
2.012	LDAAC	Inspect the data products received using ECS Client, HDF, or other inspection tools.		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001	LDAAC	Exit all windows and shutdown the ECS Data Distribution Operator GUI.	The ECS Data Distribution Operator GUI exits.	

10.11 MOPITT User Access, Search and One-Time Order and Distribution

Description: This test case will demonstrate the ECS user's ability to search for and MOPITT L1B and L2 products verbally and using the ECS client. It will also demonstrate LDAAC's ability to distribute MOPITT L1B and L2 products and the ECS user's ability to inspect MOPITT L1B and L2 products using ECS client, HDF, and other inspection tools.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	

Test Execution:

Step	Station	Action	Expected Results	Comments
		Guide Search using the ECS Client		

2.001	Science User	Bring up the B0SOT.	B0SOT is displayed.	
2.002	Science User	Click on the Go To menu item.	A pulldown menu is displayed.	
2.003	Science User	Select Search Screen from the pulldown menu.	The Search Screen is displayed.	
2.004	Science User	Click on the radio button next to Guide Search.	The Guide Search radio button is recessed.	
2.005	Science User	Type the search criteria into the appropriate fields.		Search criteria is TBD.
2.006	Science User	Click the Execute Search button at the bottom of the screen.	The Communication Status window is displayed.	
2.007	Science User	Monitor the search by observing the status in the Communication Status window.	The search is complete when the status of Complete is displayed.	
Inventory Search and Order (ftp pull) using the ECS Client				
2.008	Science User	Bring up the B0SOT.	B0SOT is displayed.	
2.009	Science User	Click on the Go To menu item.	A pulldown menu is displayed.	
2.010	Science User	Select Search Screen from the pulldown menu.	The Search Screen is displayed.	
2.011	Science User	Click on the radio button next to Inventory Search.	The Inventory Search radio button is recessed.	
2.012	Science User	Type the search criteria into the appropriate fields.		Search criteria is TBD.
2.013	Science User	Click the Execute Search button at the bottom of the screen.		
2.014	Science User	Monitor the search by observing the status in the Communication Status window.	The search is complete when the status of Complete is displayed.	
2.015	Science User	After the search is complete, click the Data button for the <tbd> data.		
2.016	Science User	Click in the O column corresponding to the <tbd> granules.		
2.017	Science User	Click the Order Data button.		
2.018	Science User	Click on Package ID and Package Options.	The Package Options Selection Screen appears.	
2.019	Science User	Select the Package Options.		Options - TBD (ftp pull should be included)

2.020	Science User	Click the OK button.		
2.021	Science User	On the Order Data Screen, click the Submit Order button.	LDAAC receives the submitted order.	
2.022	LDAAC	Process the product order.	The data is staged on the <tbd> directory.	
2.023	LDAAC	Send "Distribution Notice" to notify the user that the requested data has been staged.		
2.024	LDAAC	Verify email notification is received by the user.		
2.025	Science User	Ftp pull the staged data product.	The user receives the requested data product.	
2.026	LDAAC	Verify that the data product has been received by the user.		
2.027	Science User	Inspect the data product received using ECS Client, HDF, or other inspection tools.		
Directory Search and Order (media) using the ECS Client				
2.028	Science User	Bring up the B0SOT.	B0SOT is displayed.	
2.029	Science User	Click on the Go To menu item.	A pulldown menu is displayed.	
2.030	Science User	Select Search Screen from the pulldown menu.	The Search Screen is displayed.	
2.031	Science User	Click on the radio button next to Directory Search.	The Directory Search radio button is recessed.	
2.032	Science User	Type the search criteria into the appropriate fields.		Search criteria is TBD.
2.033	Science User	Click the Execute Search button at the bottom of the screen.		
2.034	Science User	Monitor the search by observing the status in the Communication Status window.	The search is complete when the status of Complete is displayed.	
2.035	Science User	After the search is complete, click the Data button for the <tbd> data.		
2.036	Science User	Click in the O column corresponding to the <tbd> granules.		

2.037	Science User	Click the Order Data button.		
2.038	Science User	Click on Package ID and Package Options.	The Package Options Selection Screen appears.	
2.039	Science User	Select the Package Options.		Options - TBD (tape media should be included)
2.040	Science User	Click the OK button.		
2.041	Science User	On the Order Data Screen, click the Submit Order button.	LDAAC receives the submitted order.	
2.042	LDAAC	Process the product order.		Detailed steps are TBD.
2.043	LDAAC	Verify that the data product has been received by the user.		
2.044	Science User	Inspect the data product received using ECS Client, HDF, or other inspection tools.		
Verbal Request (ftp push)				
2.045	LDAAC	Receive verbal request from user for subscription to MOPITT data product. Record the following information from the ECS user: UserID email address email text start date expiration date event ID	The specified info is recorded.	
2.046	LDAAC	Log the request for data in the User Contact Log. . Refer to Section 19.2.1 of the Mission Operation Procedures document (611-CD-006-001).	An entry is created in the User Contact Log	ECS user info TBD.
2.047	LDAAC	Launch the ECS User Account Management tool to validate the user. Refer to Section 19.2.2 of the Mission Operation Procedures document (611-CD-006-001).	The user info is displayed in the ECS User Account Management tool.	
2.048	LDAAC	Bring up the B0SOT.	B0SOT is displayed.	

2.049	LDAAC	Click on the Go To menu item.	A pulldown menu is displayed.	
2.050	LDAAC	Select Search Screen from the pulldown menu.	The Search Screen is displayed.	
2.051	LDAAC	Click on the radio button next to Inventory Search.	The Inventory Search radio button is recessed.	
2.052	LDAAC	Type the search criteria into the appropriate fields.		Search criteria is TBD.
2.053	LDAAC	Click the Execute Search button at the bottom of the screen.		
2.054	LDAAC	Monitor the search by observing the status in the Communication Status window.	The search is complete when the status of Complete is displayed.	
2.055	LDAAC	After the search is complete, click the Data button for the <tbd> data.		
2.056	LDAAC	Click in the O column corresponding to the <tbd> granules.		
2.057	LDAAC	Click the Order Data button.		
2.058	LDAAC	Click on Package ID and Package Options.	The Package Options Selection Screen appears.	
2.059	LDAAC	Select the Package Options.		Options - TBD (ftp push should be included)
2.060	LDAAC	Click the OK button.		
2.061	LDAAC	On the Order Data Screen, click the Submit Order button.	LDAAC receives the submitted order.	
2.062	LDAAC	Process the product order.		Detailed steps are TBD.
2.063	LDAAC	Verify that the data product has been received by the user.		
2.064	LDAAC	Inspect the data product received using ECS Client, HDF, or other inspection tools.		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001	LDAAC	Exit all windows and shutdown the ECS Data Distribution Operator GUI.	The ECS Data Distribution Operator GUI exits.	

10.12 Ingest and Archive of Ancillary Data

Note: There will be no ancillary data for LDAAC. This test will be replaced by the test for transfer of data between DAACs when the information becomes available.

Description: This test case will demonstrate the ability of the LDAAC to receive, ingest and archive ancillary data needed for production. The data will be received via electronic and media transfer.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		TBS		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		TBS		

10.13 Concurrent Ingest, Archive, Processing and Distribution for CERES, MISR and MOPITT

NOTE: CERES processing is on hold.

Description: This test case will demonstrate the LDAAC's ability to provide a comprehensive plan for more than one PGE including chained and concurrent processing. Concurrent end-to-end processing for MISR and MOPITT will also be demonstrated.

Note: Concurrent ingest, archive and distribution will be tested for all instruments. Processing for all instruments will also be tested concurrently. MISR and CERES processing is performed by the LDAAC and MOPITT processing is performed by the MOPITT SCF.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001	LDAAC	Rerun test case 10.2, 10.3, 10.4, 10.8, 10.9, 10.10 simultaneously.	All tests run to completion without failure generating and distributing the correct products.	

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001	LDAAC	Exit all windows and logout of workstation.	The windows exit and the workstation login prompt is displayed.	

10.14 Add/Modify ESDTs

Description: This test case will demonstrate the LDAAC's ability to add and modify new system and science product ESDTs, evaluate proposed ESDTs using test mode and promote new ESDTs into operations.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		TBS		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		TBS		

10.15 Processing Science Algorithm Processing Change and SSI&T for New PGE

Description: This test will demonstrate the ability of the LDAAC to receive algorithm changes from an instrument team SCF, evaluate the proposed change in test mode and promote the change to production in operations mode. This test will also demonstrate the ability of the LDAAC to receive, inspect and perform infusion testing of a new PGE and associated test data, perform integration testing of the new PGE to include chaining for higher level products and to promote the PGE into operations using actual data from EOS AM-1.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		TBS		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		TBS		

10.16 Mode Management

Description: The test will demonstrate the ability of the LDAAC to use mode management to conduct simultaneous operations and test activities and to conduct simultaneous operations and SSI&T activities.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001	LDAAC	Execute test cases 10.3 and 10.4 in OPS mode.	The tests should complete without failing.	

| 2.002 | LDAAC | Execute the portion of test case 10.15 which tests a new PGE in TS2 (the same PGE may be used). | The tests should complete without failing. | All tests should be running simulaneously without interfering with any other modes than the one that the test in running in. |

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001	LDAAC	Exit all windows and logout of workstation.	The windows exit and the workstation login prompt is displayed.	

10.17 System Administration

Description: This test case will demonstrate the LDAAC's ability to perform system administration tasks in the DCE cell, including add, delete and edit capabilities; system startup, shutdown, backup and recovery; the ability to add, delete and modify internal users; and the ability to recover from a network failure.

10.17.1 Add, Delete and Modify Internal User

Description: This test will demonstrate the ability of the LDAAC to add, delete, and modify an internal user in UNIX and DCE using the appropriate forms and Tivoli.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	SA	Verify the TBD servers are running.	The following servers are running: TBD	

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001	SA	Login to l0msh03 as an SA.	The operating system prompt is displayed.	

2.002	SA	Add an internal user. Refer to Section 3.4.1 of the Mission Operation Procedures document (611-CD-006-001).	The new user is added.	The following details are needed to add a new user and are TBD: Real name of the new user Office number of the new user Office phone number of the new user Home phone number of the new user Organization Group affiliation(s) Role(s) of the new user.
2.003	SA	In a new xterm login to l0msh03 as the new user.	The operating system prompt will be displayed.	
2.004	SA	Set the necessary environment variables by typing: **>setenv DISPLAY <ip_address>:0.0** **>setenv ECS_HOME /usr/ecs/** **>dce_login <dce_login_id> <dce_password>**		
2.005	SA	Start the DAAC Desktop by typing: **>daac**	An error message is displayed stating that the DAAC desktop cannot be started.	
2.006	SA	Modify the following user info: New Real User Name New Login ID New Office Number New Office Phone Number New Home Phone Number New UNIX Group New DCE Group New DCE Organization New Login Shell. Refer to Section 3.4.3 of the Mission Operation Procedures document (611-CD-006-001).	The user's info is modified.	The details to be modified for the new user are TBD: New Real User Name New Login ID New Office Number New Office Phone Number New Home Phone Number New UNIX Group New DCE Group New DCE Organization New Login Shell.
2.007	SA	In a new xterm login to l0msh03 as the new user.	The operating system prompt will be displayed.	

2.008	SA	Set the necessary environment variables by typing: **>setenv DISPLAY <ip_address>:0.0** **>setenv ECS_HOME /usr/ecs/** **>dce_login <dce_login_id> <dce_password>**		
2.009	SA	Perform a function that the user has just been granted permissions to perform.	<function> is started and executed without errors.	<function> is TBD.
2.010	SA	Delete the new user (the user that was modified in 2.006). Refer to Section 3.4.2 of the Mission Operation Procedures document (611-CD-006-001).	The user is deleted.	
2.011	SA	In a new xterm login to l0msh03 as the deleted user.	An error is displayed stating that the username is invalid.	

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001	LDAAC	Exit all windows and logout of workstation.	The windows exit and the workstation login prompt is displayed.	

10.17.2 Trouble Ticketing

Description: This test will demonstrate the ability of the LDAAC to complete a Trouble Ticket according to the LDAAC procedures and submit the Trouble Ticket to the database via the Remedy software.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001	LDAAC	Login to l0msh03.	The operating system prompt will be displayed.	

2.002	LDAAC	Set the necessary environment variables by typing: **>setenv DISPLAY \<ip_address\>:0.0** **>setenv ECS_HOME /usr/ecs/**		
2.003	LDAAC	Start the Trouble Ticket GUI using Remedy.	Remedy starts.	
2.004	LDAAC	Submit a Trouble Ticket. Refer to Section 8.2.2 of the Mission Operation Procedures document (611-CD-006-001) and use the instructions under the heading of For submission through Remedy.	A Trouble Ticket is submitted without errors.	
2.005	LDAAC	Click on **File→Exit**.	Remedy exits.	
2.006	LDAAC	Submit a second Trouble Ticket. Refer to Section 8.2.2 of the Mission Operation Procedures document (611-CD-006-001) and use the instructions under the heading of For submission from a Remedy Contact Log entry.	A Trouble Ticket is submitted without errors.	
2.007	LDAAC	View the two new Trouble Tickets. Refer to Section 8.2.3 of the Mission Operation Procedures document (611-CD-006-001) and use the instructions under the heading of For Reviewing and Modifying Trouble Tickets through Remedy.	The two new Trouble Tickets are displayed with the correct information.	
2.008	LDAAC	Click on **File→Exit**.	Remedy exits.	

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001	LDAAC	Exit all windows and logout of workstation.	The windows exit and the workstation login prompt is displayed.	

10.17.3 System Startup and System Shutdown

Description: The test will demonstrate the ability of the LDAAC to shutdown and startup the ECS system under normal conditions. The ECS system software will be shutdown, the machines will be powered down, then the machines will be powered up and the ECS system software will be started up.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Know which machine performs the following functions: DNS Master NIS Master Mail Hub Server(s) Automount Server Clearcase Server CSS including DCE Server DCE License Server for SUN Other License Servers MSS including Tivoli Server and Sybase SQL Servers DSS Ingest PDPS CIDM		

Test Execution:

Step	Station	Action	Expected Results	Comments
Repeat the following steps for each subsystem machine.				
2.001	LDAAC	Log into <machine> by typing: **<user_id>** **<password>**	Operating system prompt is displayed.	machine is TBD.
2.002	LDAAC	Set environment variables by typing: >**setenv DISPLAY <hostname>:0.0** >**setenv ECS_HOME /usr/ecs/**		
2.003	LDAAC	Start ECS Assist by typing: >**cd /tools/common/ea** >**EcCoAssist &**	ECS Assist introductory window is displayed.	
2.004	LDAAC	Click the **Subsystem Manager** button.	Subsystem Manager GUI is displayed.	
Repeat the following steps for each mode, component, server combination on the machine.				

2.005	LDAAC	Under the Modes heading click on **<MODE>**.	<MODE> is highlighted.	
2.006	LDAAC	Under the Subsystems heading click on radio button next to **<subsystem>**.	The radio button next to <subsystem> is recessed and the component list for the selected subsystem will appear under the Components heading..	
2.007	LDAAC	Under the Components heading click on **<component>**.	<component> is highlighted and the server list corresponding to that component will appear under the Servers heading.	
2.008	LDAAC	Under the Servers heading click on **<server>**.	<server> is highlighted.	
2.009	LDAAC	Click the **kill** button.	<server> is shutdown.	
		After all servers are shutdown perform the following steps.		
2.010	LDAAC	Click on **File-->Exit**.	ECS Assist closes and operating system prompt is displayed.	
2.011	LDAAC	Type: **>ps -ef | grep <subsystem_designation>**.	No ECS processes are displayed.	<subsystem_designation> i.e. DMS EcD
		Perform the following steps to shutdown all machines. **STEPS MUST BE PERFORMED IN THIS ORDER.**		
2.012	LDAAC	Log in to the CIDM machine(s) as root: **root <root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.013	LDAAC	Type: **>wall** press return then type: **<Shutdown message> <Control-D>**	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.014	LDAAC	Wait 5 minutes.		Give users time to save their work and log off.
2.015	LDAAC	Type: **>shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.016	LDAAC	Power off all peripherals then power off the cpu.		

2.017	LDAAC	Log in to the PDPS machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.018	LDAAC	Type: >**wall** press return then type: **<Shutdown message>** **<Control-D>**	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.019	LDAAC	Wait 5 minutes.		Give users time to save their work and log off.
2.020	LDAAC	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.021	LDAAC	Power off all peripherals then power off the cpu.		
2.022	LDAAC	Log in to the Ingest machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.023	LDAAC	Type: >**wall** press return then type: **<Shutdown message>** **<Control-D>**	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.024	LDAAC	Wait 5 minutes.		Give users time to save their work and log off.
2.025	LDAAC	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.026	LDAAC	Power off all peripherals then power off the cpu.		
2.027	LDAAC	Log in to the DSS machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	

2.028	LDAAC	Type: >**wall** press return then type: <**Shutdown message**> <**Control-D**>	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.029	LDAAC	Wait 5 minutes.		Give users time to save their work and log off.
2.030	LDAAC	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.031	LDAAC	Power off all peripherals then power off the cpu.		
2.032	LDAAC	Log in to the MSS machine(s) as root: **root** <**root_password**>	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.033	LDAAC	Type: >**wall** press return then type: <**Shutdown message**> <**Control-D**>	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.034	LDAAC	Wait 5 minutes.		Give users time to save their work and log off.
2.035	LDAAC	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.036	LDAAC	Power off all peripherals then power off the cpu.		
2.037	LDAAC	Log in to the Other License Server(s) machine(s) as root: **root** <**root_password**>	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.038	LDAAC	Type: >**wall** press return then type: <**Shutdown message**> <**Control-D**>	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.039	LDAAC	Wait 5 minutes.		Give users time to save their work and log off.

2.040	LDAAC	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.041	LDAAC	Power off all peripherals then power off the cpu.		
2.042	LDAAC	Log in to the DCE License Server for SUN machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.043	LDAAC	Type: >**wall** press return then type: **<Shutdown message>** **<Control-D>**	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.044	LDAAC	Wait 5 minutes.		Give users time to save their work and log off.
2.045	LDAAC	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.046	LDAAC	Power off all peripherals then power off the cpu.		
2.047	LDAAC	Log in to the CSS machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.048	LDAAC	Type: >**wall** press return then type: **<Shutdown message>** **<Control-D>**	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.049	LDAAC	Wait 5 minutes.		Give users time to save their work and log off.
2.050	LDAAC	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.051	LDAAC	Power off all peripherals then power off the cpu.		

2.052	LDAAC	Log in to the Clearcase Server machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.053	LDAAC	Type: >**wall** press return then type: **<Shutdown message>** **<Control-D>**	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.054	LDAAC	Wait 5 minutes.		Give users time to save their work and log off.
2.055	LDAAC	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.056	LDAAC	Power off all peripherals then power off the cpu.		
2.057	LDAAC	Log in to the Automount Server machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.058	LDAAC	Type: >**wall** press return then type: **<Shutdown message>** **<Control-D>**	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.059	LDAAC	Wait 5 minutes.		Give users time to save their work and log off.
2.060	LDAAC	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.061	LDAAC	Power off all peripherals then power off the cpu.		
2.062	LDAAC	Log in to the Mail Hub Server machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	

2.063	LDAAC	Type: >**wall** press return then type: <**Shutdown message**> <**Control-D**>	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.064	LDAAC	Wait 5 minutes.		Give users time to save their work and log off.
2.065	LDAAC	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.066	LDAAC	Power off all peripherals then power off the cpu.		
2.067	LDAAC	Log in to the NIS Master machine(s) as root: **root** <**root_password**>	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.068	LDAAC	Type: >**wall** press return then type: <**Shutdown message**> <**Control-D**>	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.069	LDAAC	Wait 5 minutes.		Give users time to save their work and log off.
2.070	LDAAC	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.071	LDAAC	Power off all peripherals then power off the cpu.		
2.072	LDAAC	Log in to the DNS Master machine(s) as root: **root** <**root_password**>	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.073	LDAAC	Type: >**wall** press return then type: <**Shutdown message**> <**Control-D**>	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.074	LDAAC	Wait 5 minutes.		Give users time to save their work and log off.

2.075	LDAAC	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.076	LDAAC	Power off all peripherals then power off the cpu.		
2.077	LDAAC	Wait for 5 minutes.		This step is only to give the circuitry time to shut all the way down before restarting the system.
2.078	LDAAC	Power on the DNS Master machine(s).	DNS Master machine(s) boots without error.	
2.079	LDAAC	After previous server boots successfully, power on the NIS Master machine(s).	NIS Master machine(s) boots without error.	
2.080	LDAAC	After previous server boots successfully, power on the Mail Hub Server machine(s).	Mail Hub Server machine(s) boots without error.	
2.081	LDAAC	After previous server boots successfully, power on the Automount Server machine(s).	Automount Server machine(s) boots without error.	
2.082	LDAAC	After previous server boots successfully, power on the Clearcase Server machine(s).	Clearcase Server machine(s) boots without error.	
2.083	LDAAC	After previous server boots successfully, power on the CSS machine(s).	CSS machine(s) boots without error.	
2.084	LDAAC	After previous server boots successfully, power on the DCE License Server for SUN machine(s).	DCE License Server for SUN machine(s) boots without error.	
2.085	LDAAC	After previous server boots successfully, power on the Other License Server machine(s).	Other License Server machine(s) boots without error.	
2.086	LDAAC	After previous server boots successfully, power on the MSS Server machine(s).	MSS Server machine(s) boots without error.	
2.087	LDAAC	After previous server boots successfully, power on the DSS Server machine(s).	DSS Server machine(s) boots without error.	
2.088	LDAAC	After previous server boots successfully, power on the PDPS Server machine(s).	PDPS Server machine(s) boots without error.	

2.089	LDAAC	After previous server boots successfully, power on the CIDM Server machine(s).	CIDM Server machine(s) boots without error.	
Repeat the following steps for each subsystem machine.
2.090	LDAAC	Log into <machine> by typing: **<user_id>** **<password>**	Operating system prompt is displayed.	machine is TBD.
2.091	LDAAC	Set environment variables by typing: **>setenv DISPLAY <hostname>:0.0** **>setenv ECS_HOME /usr/ecs/**		
2.092	LDAAC	Start ECS Assist by typing: **>cd /tools/common/ea** **>EcCoAssist &**	ECS Assist introductory window is displayed.	
2.093	LDAAC	Click the **Subsystem Manager** button.	Subsystem Manager GUI is displayed.	
Repeat the following steps for each mode, component, server combination on the machine.
2.094	LDAAC	Under the Modes heading click on **<MODE>**.	<MODE> is highlighted.	
2.095	LDAAC	Under the Subsystems heading click on radio button next to **<subsystem>**.	The radio button next to <subsystem> is recessed and the component list for the selected subsystem will appear under the Components heading..	
2.096	LDAAC	Under the Components heading click on **<component>**.	<component> is highlighted and the server list corresponding to that component will appear under the Servers heading.	
2.097	LDAAC	Under the Servers heading click on **<server>**.	<server> is highlighted.	
2.098	LDAAC	Click the **start** button.	<server> is started.	
2.099	LDAAC	Click the **monitor** button.	The ECS Monitor GUI is displayed.	
2.100	LDAAC	Verify that <server> has a status of UP.	The status listed for <server> should displayed as UP.	
2.101	LDAAC	Click on **File-->Exit**.	ECS Assist closes and operating system prompt is displayed.	
2.102	LDAAC	Type: **>ps -ef	grep <subsystem_designation>**.	All ECS processes are displayed.	<subsystem_designation> i.e. DMS EcD

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001	LDAAC	Exit all windows and shutdown ECS Assist.	ECS Assist exits.	

10.17.4 Backup and Recovery

Description: This test verifies LDAAC's ability to backup and restore individual files and the LDAAC ECS system. A single directory, a single system, and all systems comprising the LDAAC ECS system are backed up and restored.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001	Operator	Perform an incremental backup of <directory>. Refer to Section 3.2.1of the Mission Operation Procedures document (611-CD-006-001).	The incremental backup completes without errors.	<directory> is TBD.
2.002	Operator	Perform a full backup. Refer to Section 3.2.2 of the Mission Operation Procedures document (611-CD-006-001).	The full backup completes without errors.	
2.003	Operator	Restore files from the backup generated in step 2.001. Refer to Section 3.2.3 of the Mission Operation Procedures document (611-CD-006-001).	The restore completes without errors.	
2.004	Operator	Verify the files were restored by typing: >**cd <directory>** >**ls -l**	The list of files are displayed.	<directory> is TBD.
2.005	Operator	Verify that the files are accessible by typing: >**vi <filename>**	The contents of <filename> are displayed.	<filename> is TBD.

2.006	Operator	Perform a Complete System Restore using the backup generated in step 2.002. Refer to Section 3.2.4 of the Mission Operation Procedures document (611-CD-006-001)	The restore completes without errors.	
2.007	Operator	For each machine comprising the LDAAC ECS system perform a full backup. Refer to Section 3.2.2 of the Mission Operation Procedures document (611-CD-006-001).	The backup completes without errors on each machine.	
2.008	Operator	For each machine comprising the LDAAC ECS system perform a Complete System Restore using the backup generated in step 2.007. Refer to Section 3.2.4 of the Mission Operation Procedures document (611-CD-006-001).	The restore completes without errors on each machine.	
Repeat the following steps for each machine comprising the LDAAC ECS system.
2.009	Operator	Log into <machine> by typing: **<user_id>** **<password>**	Operating system prompt is displayed.	machine is TBD.
2.010	Operator	Set environment variables by typing: **>setenv DISPLAY <hostname>:0.0** **>setenv ECS_HOME /usr/ecs/**		
2.011	Operator	Start ECS Assist by typing: **>cd /tools/common/ea** **>EcCoAssist &**	ECS Assist introductory window is displayed.	
2.012	Operator	Click the **Subsystem Manager** button.	Subsystem Manager GUI is displayed.	
Repeat the following steps for each mode, component, server combination on the machine.
2.013	Operator	Under the Modes heading click on **<MODE>**.	<MODE> is highlighted.	

2.014	Operator	Under the Subsystems heading click on radio button next to **<subsystem>**.	The radio button next to <subsystem> is recessed and the component list for the selected subsystem will appear under the Components heading..	
2.015	Operator	Under the Components heading click on **<component>**.	<component> is highlighted and the server list corresponding to that component will appear under the Servers heading.	
2.016	Operator	Under the Servers heading click on **<server>**.	<server> is highlighted.	
2.017	Operator	Click the **kill** button.	<server> is shutdown.	
		After all servers are shutdown perform the following steps.		
2.018	Operator	Click on **File-->Exit**.	ECS Assist closes and operating system prompt is displayed.	
2.019	Operator	Type: **>ps -ef | grep <subsystem_designation>**.	No ECS processes are displayed.	<subsystem_designation> i.e. DMS EcD
		Perform the following steps to shutdown all machines comprising the LDAAC ECS system. **STEPS MUST BE PERFORMED IN THIS ORDER.**		
2.020	Operator	Log in to the CIDM machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.021	Operator	Type: **>wall** press return then type: **<Shutdown message>** **<Control-D>**	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.022	Operator	Wait 5 minutes.		Give users time to save their work and log off.
2.023	Operator	Type: **>shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.024	Operator	Power off all peripherals then power off the cpu.		
2.025	Operator	Log in to the PDPS machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	

2.026	Operator	Type: >**wall** press return then type: <**Shutdown message**> <**Control-D**>	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.027	Operator	Wait 5 minutes.		Give users time to save their work and log off.
2.028	Operator	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.029	Operator	Power off all peripherals then power off the cpu.		
2.030	Operator	Log in to the Ingest machine(s) as root: **root** <**root_password**>	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.031	Operator	Type: >**wall** press return then type: <**Shutdown message**> <**Control-D**>	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.032	Operator	Wait 5 minutes.		Give users time to save their work and log off.
2.033	Operator	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.034	Operator	Power off all peripherals then power off the cpu.		
2.035	Operator	Log in to the DSS machine(s) as root: **root** <**root_password**>	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.036	Operator	Type: >**wall** press return then type: <**Shutdown message**> <**Control-D**>	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.037	Operator	Wait 5 minutes.		Give users time to save their work and log off.

2.038	Operator	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.039	Operator	Power off all peripherals then power off the cpu.		
2.040	Operator	Log in to the MSS machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.041	Operator	Type: >**wall** press return then type: **<Shutdown message>** **<Control-D>**	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.042	Operator	Wait 5 minutes.		Give users time to save their work and log off.
2.043	Operator	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.044	Operator	Power off all peripherals then power off the cpu.		
2.045	Operator	Log in to the Other License Server(s) machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.046	Operator	Type: >**wall** press return then type: **<Shutdown message>** **<Control-D>**	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.047	Operator	Wait 5 minutes.		Give users time to save their work and log off.
2.048	Operator	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.049	Operator	Power off all peripherals then power off the cpu.		

2.050	Operator	Log in to the DCE License Server for SUN machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.051	Operator	Type: **>wall** press return then type: **<Shutdown message>** **<Control-D>**	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.052	Operator	Wait 5 minutes.		Give users time to save their work and log off.
2.053	Operator	Type: **>shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.054	Operator	Power off all peripherals then power off the cpu.		
2.055	Operator	Log in to the CSS machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.056	Operator	Type: **>wall** press return then type: **<Shutdown message>** **<Control-D>**	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.057	Operator	Wait 5 minutes.		Give users time to save their work and log off.
2.058	Operator	Type: **>shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.059	Operator	Power off all peripherals then power off the cpu.		
2.060	Operator	Log in to the Clearcase Server machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	

2.061	Operator	Type: >**wall** press return then type: <**Shutdown message**> <**Control-D**>	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.062	Operator	Wait 5 minutes.		Give users time to save their work and log off.
2.063	Operator	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.064	Operator	Power off all peripherals then power off the cpu.		
2.065	Operator	Log in to the Automount Server machine(s) as root: **root** <**root_password**>	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.066	Operator	Type: >**wall** press return then type: <**Shutdown message**> <**Control-D**>	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.067	Operator	Wait 5 minutes.		Give users time to save their work and log off.
2.068	Operator	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.069	Operator	Power off all peripherals then power off the cpu.		
2.070	Operator	Log in to the Mail Hub Server machine(s) as root: **root** <**root_password**>	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.071	Operator	Type: >**wall** press return then type: <**Shutdown message**> <**Control-D**>	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.072	Operator	Wait 5 minutes.		Give users time to save their work and log off.

2.073	Operator	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.074	Operator	Power off all peripherals then power off the cpu.		
2.075	Operator	Log in to the NIS Master machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.076	Operator	Type: >**wall** press return then type: **<Shutdown message>** **<Control-D>**	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.077	Operator	Wait 5 minutes.		Give users time to save their work and log off.
2.078	Operator	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.079	Operator	Power off all peripherals then power off the cpu.		
2.080	Operator	Log in to the DNS Master machine(s) as root: **root** **<root_password>**	Successful login to DNS Master machine and the operating system prompt is displayed.	
2.081	Operator	Type: >**wall** press return then type: **<Shutdown message>** **<Control-D>**	The warning message is displayed on all terminals connected to the machine.	The shutdown message should say that the system is being shutdown now, should ask to please save your work and log off now and should give the reason for the shutdown.
2.082	Operator	Wait 5 minutes.		Give users time to save their work and log off.
2.083	Operator	Type: >**shutdown -g0 -i0**	After a short delay, messages will be displayed and the PROM prompt will be displayed.	
2.084	Operator	Power off all peripherals then power off the cpu.		

2.085	Operator	Wait for 5 minutes.		This step is only to give the circuitry time to shut all the way down before restarting the system.
2.086	Operator	Power on the DNS Master machine(s).	DNS Master machine(s) boots without error.	
2.087	Operator	After previous server boots successfully, power on the NIS Master machine(s).	NIS Master machine(s) boots without error.	
2.088	Operator	After previous server boots successfully, power on the Mail Hub Server machine(s).	Mail Hub Server machine(s) boots without error.	
2.089	Operator	After previous server boots successfully, power on the Automount Server machine(s).	Automount Server machine(s) boots without error.	
2.090	Operator	After previous server boots successfully, power on the Clearcase Server machine(s).	Clearcase Server machine(s) boots without error.	
2.091	Operator	After previous server boots successfully, power on the CSS machine(s).	CSS machine(s) boots without error.	
2.092	Operator	After previous server boots successfully, power on the DCE License Server for SUN machine(s).	DCE License Server for SUN machine(s) boots without error.	
2.093	Operator	After previous server boots successfully, power on the Other License Server machine(s).	Other License Server machine(s) boots without error.	
2.094	Operator	After previous server boots successfully, power on the MSS Server machine(s).	MSS Server machine(s) boots without error.	
2.095	Operator	After previous server boots successfully, power on the DSS Server machine(s).	DSS Server machine(s) boots without error.	
2.096	Operator	After previous server boots successfully, power on the PDPS Server machine(s).	PDPS Server machine(s) boots without error.	
2.097	Operator	After previous server boots successfully, power on the CIDM Server machine(s).	CIDM Server machine(s) boots without error.	
Repeat the following steps for each machine comprising the LDAAC ECS system.				

2.098	Operator	Log into <machine> by typing: <user_id> <password>	Operating system prompt is displayed.	machine is TBD.
2.099	Operator	Set environment variables by typing: >setenv DISPLAY <hostname>:0.0 >setenv ECS_HOME /usr/ecs/		
2.100	Operator	Start ECS Assist by typing: >cd /tools/common/ea >EcCoAssist &	ECS Assist introductory window is displayed.	
2.101	Operator	Click the **Subsystem Manager** button.	Subsystem Manager GUI is displayed.	
Repeat the following steps for each mode, component, server combination on the machine.				
2.102	Operator	Under the Modes heading click on **<MODE>**.	<MODE> is highlighted.	
2.103	Operator	Under the Subsystems heading click on radio button next to **<subsystem>**.	The radio button next to <subsystem> is recessed and the component list for the selected subsystem will appear under the Components heading..	
2.104	Operator	Under the Components heading click on **<component>**.	<component> is highlighted and the server list corresponding to that component will appear under the Servers heading.	
2.105	Operator	Under the Servers heading click on **<server>**.	<server> is highlighted.	
2.106	Operator	Click the **start** button.	<server> is started.	
2.107	Operator	Click the **monitor** button.	The ECS Monitor GUI is displayed.	
2.108	Operator	Verify that <server> has a status of UP.	The status listed for <server> should displayed as UP.	
2.109	Operator	Click on **File-->Exit**.	ECS Assist closes and operating system prompt is displayed.	
2.110	Operator	Type: >ps -ef	grep <subsystem_designation>.	All ECS processes are displayed.	<subsystem_designation> i.e. DMS EcD

Test Termination:

Step	Station	Action	Expected Results	Comments

3.001	Operator	Exit all windows and logout of workstation.	The workstation login prompt is displayed.	

10.17.5 Recovery from a Network Failure

Description: This test verifies LDAAC's ability to detect a network failure, verify that an object is down and recover from a network failure using Network Node Manager (NNM).

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	Fault Manager	Verify the TBD servers are running.	The following servers are running: TBD	
1.002	Fault Manager	Verify that the ovwdb, trapd, ovtopmd, ovactiond, snmpCollect and netmon background processes are running.	The following background processes are running: ovwdb, trapd, ovtopmd, ovactiond, snmpCollect and netmon	

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001	Fault Manager	Start the NNM. Refer to Section 7.1.1of the Mission Operation Procedures document (611-CD-006-001).	The site network map is displayed.	
2.002	Fault Manager	Click on Map Description then select **File: Describe/Modify Map**.	Get the compound status scheme of the open map so that the fault manager knows how status propagates from objects in a submap to the parent object.	
2.003	Fault Manager	Verify that all nodes are up and functioning.	All nodes are displayed as green.	
2.004	Fault Manager	Unplug the network cable from a node.		
2.005	Fault Manager	Verify that the node is not functioning. Refer to Section 7.1.3of the Mission Operation Procedures document (611-CD-006-001).	There is no ping response from the red node.	
2.006	Fault Manager	Plug the network cable back into the node.		

| 2.007 | Fault Manager | Verify that the node is working again. | All nodes on the site network map are green. | |
| 2.008 | Fault Manager | Click **File → Exit**. | The NNM exits with no errors. | |

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001	Fault Manager	Exit all windows and logout of workstation.	The workstation login prompt is displayed.	

10.17.6 Reports Generation

This scenario was moved to a Launch Essential scenario.
Description: This test verifies the LDAAC's ability to get reports of user statistics.

Test Setup:

Step	Station	Action	Expected Results	Comments
1.001	LDAAC	Verify the TBD servers are running.	The following servers are running: TBD	

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		TBS		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		TBS		

10.18 Creation of Subscription for CERES Data Products - ON HOLD

CERES processing is on hold.

10.19 Ingest and Archive of CERES L0 Data and L0 Expedited Data - ON HOLD

CERES processing is on hold.

10.20 Product Generation for CERES - ON HOLD

CERES processing is on hold.

10.21 Distribution of CERES Products - ON HOLD

CERES processing is on hold.

10.22 Failure Recovery for CERES Processing - ON HOLD

CERES processing is on hold.

Appendix A - Requirements Matrix

REQ_ID	REQ_TEXT
DADS0010#B	Each DADS shall receive updated metadata for products that have been QA'd.
DADS0020#B	Each DADS shall, upon receipt of updated metadata for products which have been QA'd, store the metadata in its inventory.
DADS0120#B	Each DADS shall receive from the PGS, at a minimum, the following: a. L1-4 products b. (DELETED) c. Metadata d. Calibration e. Algorithms f. Schedule g. Status
DADS0130#B	Each DADS shall receive from the EDOS, at a minimum, the following: a. Production data (L0) b. Expedited data
DADS0250#B	Each DADS shall receive, at a minimum, data in the following forms: a. Physical electronic media b. Electronic communications network c. Hardcopy media
DADS0440#B	Each DADS shall provide storage, at a minimum, for the following EOS data: a. Standard Products b. Associated correlative data sets c. Associated ancillary data sets d. Associated calibration data sets e. Associated metadata f. Documents g. Algorithms h. Format descriptions (e.g., HDF spec.)
DADS0490#B	Each DADS shall archive Level 1B - Level 4 data products.
DADS0530#B	The DADS shall be capable of accepting from PGS requests for refined orbit data.
DADS0535#B	The DADS shall be capable of sending a request for refined orbit data to the FDF.
DADS0910#B	Each DADS shall notify the SMC and IMS in the event that data required in connection with an on-demand request does not arrive.
DADS1100#B	Each DADS shall maintain a log of all updates to the local inventory. The log shall be used to generate status reports and, in conjunction with the inventory backup, recreate the local inventory in the event of catastrophic failure.

DADS1450#B	Each DADS shall be capable of screening its archive holdings of Level 1A or Level 0 data, and if a product(s) is found to be lost or unreadable, generate a request for a replacement product from EDOS, dispatch the request, and ingest the replacement product.
DADS1472#B	Each DADS shall contain the appropriate capacity to respond to contingencies, scheduling problems, and peak loads.
DADS2070#B	Each DADS shall interact with EDOS and SMC to resolve schedule conflicts.
DADS2100#B	Each DADS shall receive time windows and priorities requested by the user for incorporation into and modification of its schedule.
DADS2110#B	The DADS shall provide scheduling information to the SMC.
DADS2120#B	The DADS shall have access to the system wide scheduling information. Such information includes, at a minimum, ESDIS Policies and Procedures regarding instrument and ground event scheduling, other element plans and schedules, element allocations of ground event functions and capabilities, product thread information, and scheduling directives for testing, maintenance, and emergency situations.
DADS2330#B	Each DADS shall send to the PGS, at a minimum, the following: a. Production data (L0) received from EDOS b. L0-L4 c. (DELETED) d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status j. Spacecraft and instrument logs k. Special data sets l. Non-EOS science data from ADCs/ODCs
DADS2340#B	Each DADS shall send to remote DAACs, at a minimum, the following: a. L0-L4 b. Metadata c. Ancillary data d. Calibration data e. Correlative data f. Documents g. Algorithms h. Spacecraft and instrument logs

DADS2370#B	Each DADS shall send to the user, at a minimum, the following: a. L0-L4 b. Special products (L1-L4) c. Metadata d. Ancillary data e. Calibration data f. Correlative data g. Documents h. Algorithms i. Planning and scheduling information
DADS2440#B	Each DADS shall distribute data under a multi-level priority system. For example: a. Expedited data b. QA data c. Data products requested by standing order d. Data products requested retrospectively
DADS2490#B	Each DADS shall distribute data using a variety of approved high density storage media such as : a. 8 mm tape b. 4 mm DAT c. 3480/3490 tape d. CD ROM e. 6250 tape
DADS2510#B	Each DADS shall copy data to the class of physical media specified in the product order from the IMS.
DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand.
DADS2580#B	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.
EOSD0020#B	ECS shall use and support the EDOS/EBnet interface to obtain the data capture, data archival, and data distribution services needed to achieve full end-to-end ECS functionality.
EOSD0030#B	ECS shall, during its lifetime, ingest, archive distribute and provide search and access for Landsat 7 (including IGS metadata and browse) and related non-EOS data and products.
ESN-1180#B	The ESN shall interoperate with NSI to provide user access to ECS.
IMS-0040#B	The IMS shall verify user authorization by validation of inputs with information as supplied by the SMC.
IMS-0100#B	The IMS shall support, at a minimum: a. Interactive sessions b. Non-interactive remote sessions c. Client-server interface d. Simulated sessions for training purposes

IMS-0160#B	The IMS shall provide levels of user interaction support to include at a minimum: a. Expert (e.g., quick command driven direct information input) b. Intermediate (e.g., some prompting and automatically supplied help) c. Novice (e.g., extensive prompting and help facilities)
IMS-0210#B	The IMS shall allow data access privileges to be configurable by user and data type for: a. Read b. Write c. Update d. Delete e. Any combination of the above
IMS-0230#B	The IMS shall restrict update of ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases to authorized users based on the users access privileges.
IMS-0450#B	The IMS shall accept and validate new and updated metadata for all ECS archive data which has been ingested at the DADS.
IMS-0510#B	The IMS shall provide tools for research planning and data search, to include at a minimum: a. Data acquisition schedules and plans b. The capability to map specified geophysical parameters to the appropriate instrument and/or Standard Product c. Descriptive information on instruments and geophysical parameters available in Standard Products d. Climatology information e. Phenomenology information f. Geographic reference aids g. Spacecraft location projections.
IMS-0890#B	The IMS shall provide the capability to receive the metadata from the DADS when ADC or ODC data has been ingested into the ECS archives.
IMS-0910#B	The IMS shall provide the capability to receive the metadata from the DADS, when IP data has been ingested into the EOSDIS archives.
IMS-1080#B	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders.
NI-0360#B	ECS shall have the capability to send a notification of orbit quality checks and request updated (refined/repaired) orbit data from the FDF when necessary. Mission-specific requirements for FDF support of EOS missions will be documented in the EOS mission-level Detailed Mission Requirements documents and FDF-developed ICDs.
NI-0365#B	ECS shall have the capability to receive from FDF orbit and attitude quality checking software and parameter. Mission-specific requirements for FDF support of EOS missions will be documented in the EOS mission-level Detailed Mission Requirements documents and FDF-developed ICDs.

NI-0370#B	ECS shall have the capability to receive from FDF, at a minimum the following: a. Orbit data and associated metadata b. Attitude data and associated metadata Mission-specific requirements for FDF support of EOS missions will be documented in the EOS mission-level Detailed Mission Requirements documents and FDF-developed ICDs.
PGS-0165#B	The PGS shall accept priority processing requests from the IMS.
PGS-0180#B	The PGS shall receive a notice from DADS when data that it has received is available.
PGS-0250#B	The PGS shall schedule product generation when all inputs required to generate a Standard Product for which there is a current order (from IMS) are available. Entries in the schedule shall contain, at a minimum: a. The product to be generated b. The specific algorithm(s) and calibration coefficients to be used c. The specific data sets needed and their sizes d. Priorities and deadlines that apply to the order for the product
PGS-0270#B	The PGS shall provide the capability to perform the following functions, at a minimum: a. Allocate tasks among processors b. Suspend execution of tasks c. Resume execution of a suspended task d. Cancel execution of tasks e. Request and verify the staging and/or destaging of data stored in the DADS
PGS-0360#B	The PGS shall generate a PGS processing log that accounts for all data processing activities.
PGS-0410#B	The PGS shall have the capability to track the processing status of all products scheduled to be generated.
PGS-0456#B	The PGS shall notify the FDF, via the DADS, of orbit quality checks and request updated orbit data from the FDF when necessary.
PGS-0457#B	The PGS shall use subroutines provided by the Flight Dynamics Facility to repair orbit and attitude data when necessary
PGS-0490#B	The PGS shall have the capability to access and use, for the generation of Standard Products, information such as: a. Digital terrain map databases b. Land/sea databases c. Climatology databases d. Digital political map databases
PGS-0500#B	The PGS shall have the capability to generate Level 1 through 4 Standard Products using validated algorithms and calibration coefficients provided by the scientists.
PGS-0510#B	The PGS shall have the capability to generate metadata (see Appendix C) according to the algorithms provided by the scientists and associate this metadata with each Standard Product generated.

PGS-0560#B	The PGS shall maintain copies of generated products to be used as inputs to other scheduled products for processing efficiency.
PGS-0590#B	The PGS shall have the capability to indicate the temporary status of data stored in the DADS that is awaiting QA or human interaction in product production.
PGS-1050#B	The PGS shall provide the capability to perform both automatic and manual QA of generated products.
PGS-1060#B	The PGS shall have the capability to perform automatic QA of generated products utilizing algorithms provided by the scientists.
PGS-1080#B	The PGS shall have the capability to provide an inventory and review copy of generated products to the data product quality staff before the product is sent to the DADS for storage.
PGS-1090#B	The PGS shall have the capability to provide the data product quality staff with the algorithms, calibration coefficient tables, input data sets, or other information related to product processing for the purpose of reviewing and analyzing the quality of production.
PGS-1100#B	The PGS shall have the capability to accept product quality data input.
PGS-1110#B	The PGS shall have the capability to associate data quality with a generated product.
PGS-1120#B	The PGS shall send the DADS updated metadata provided by the data product quality staff relating to product QA review. This QA review metadata shall contain the following information at a minimum. a. Product ID b. QA Approval field c. Other metadata
PGS-1130#B	The PGS shall receive product QA from the SCF which shall describe the results of the scientist's product quality review at an SCF. Product QA shall contain the following information at a minimum: a. Identification of product b. QA results c. Product storage and processing instructions
PGS-1140#B	The PGS shall have the capability to provide the data product quality staff with the Product QA data from the SCF.
PGS-1170#B	The PGS shall have the capability to identify data products awaiting QA that have not been reviewed within the amount of time allocated for QA.
PGS-1175#B	The PGS shall maintain a list of products requiring QA by SCF or the PGS.
PGS-1180#B	The PGS shall have the capability to update the processing status of a given product as a result of a QA timeout.
SCF-0200#B	The ECS shall have the capability to receive from the SCF a QA Notification Specification. This specification, submitted by the scientist at the SCF, describes the conditions under which data should be forwarded to the SCF for QA.

SCF-0210#B	The ECS shall have the capability to send a Data Quality Request Notification to the SCF. This notification is sent when QA notification criteria are met during routine ECS processing. The notification states the data product and the time by which a notification, and optionally data, must be evaluated and returned to the ECS for inclusion as an update to the product metadata.
SCF-0220#B	The ECS shall have the capability to receive from the SCF a Request for Data to QA. This request may be a standing request specified in the QA Notification Specification and may include the data product specified in the Data Quality Request Notification, or other data required by the scientist to QA the data product.
SCF-0230#B	The ECS shall have the capability to send Data Delivered for QA to the SCF. This data includes the data requested by the scientist needed for the QA of data products.
SCF-0240#B	The ECS shall have the capability to receive an On Time QA from the SCF. This shall consist of the science QA codes describing the results of product QA and any further instructions to the ECS. The ECS shall accept the On Time QA when it is received within the time-out period specified in the Data Quality Request Notification. ECS shall accept post-time-out QA updates as Metadata Updates as specified by Requirement SCF-0250.
SCF-0250#B	The ECS shall have the capability to receive Metadata Updates from the SCF. These shall include the science QA codes and optionally a report describing the results of product QA and any further instructions to the ECS. The ECS shall only accept Metadata Updates when they are received after the time allotment specified in the Data Quality Request Notification.
SDPS0015#B	The SDPS shall receive directives on priorities and policy, including schedule conflict resolutions, from the SMC.
SDPS0016#B	The SDPS shall coordinate and resolve schedule conflicts between IMS, DADS and PGS.
SDPS0020#B	The SDPS shall receive EOS science, engineering, ancillary and expedited data from the EDOS and the IPs, and non-EOS data, in situ data, associated algorithms, documentation, correlative data, and ancillary data (as listed in Appendix C) from ADCs, EPDSs, and ODCs.
SDPS0050#B	The SDPS shall archive, manage, quality check, and account for the generated data products, and distribute the data products to the appropriate destinations as required.
SDPS0130#B	The SDPS shall provide the capability for DAACs to exchange data products, browse data, metadata, data quality information, research results, and documentation.
SMC-1330#B	The SMC shall support and maintain the information for end-to-end data ingest, processing, reprocessing, archive, and data distribution for each product, including, at a minimum: a. Product information b. Product generation information c. Product delivery information

SMC-1345#B	The LSM shall perform priority management services to resolve conflicts for ECS resources.
SMC-3350#B	The SMC shall generate, maintain, and update performance criteria and responses to performance deficiencies for system, site, and element resources and activities, such as: a. Data collection b. Product generation, QA and validation c. Reprocessing d. Data delivery to DAACs and to users e. Response to user requests f. Response to TOOs g. Response to field experiments h. Response to emergency situations